



# CASE STUDY



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American Municipal  
Power (AMP)

## **Phase 1**

## **Behind the Meter Peaking Project Serving 27 Communities**

# ABOUT THE CUSTOMER

American Municipal Power (AMP) is the nonprofit wholesale power supplier and services provider for 135 members in the states of Ohio, Pennsylvania, Michigan, Virginia, Kentucky, West Virginia, Indiana, Maryland and Delaware. Combined, these public utilities serve more than 650,000 customers. PJM is the regional transmission organization (RTO) that coordinates the movement of wholesale electricity throughout 13 midwestern and eastern states, including the majority of AMP members. AMP members receive their power supply from a diversified resource mix that includes wholesale power purchases through AMP and the open market and energy produced at AMP and member-owned generating facilities utilizing fossil fuel, hydroelectric, solar, wind and other renewable resources.



## THE CHALLENGE

In 2018, AMP looked closely at industry changes impacting the joint action agency and its members. The forecasted increase of PJM's capacity and transmission charges throughout the AMP footprint were of chief concern. In PJM, capacity charges are based on a utility's peak demand during the five highest peak hours during the summer months. Transmission charges cover the cost to deliver electricity from power-generating facilities to the utility's electric substations and to the beginning of the utility's distribution system. Transmission charges are based on a utility's peak demand during the single highest peak hour of the year. Concerned about the long-term financial impact of increasing capacity and transmission costs on their membership, AMP explored options for building new generation capacity as a hedge against these rising costs.



# THE SOLUTION

AMP engaged PowerSecure for a turnkey, fixed-price project to design, install, and maintain its Tier 4 Final PowerBlock® distributed generation systems. The first phase of the project was integrating PowerSecure generation systems into 14 member utilities in Ohio and Pennsylvania, providing benefits to a total of 27 communities. The primary purpose of the Behind the Meter Peaking Project is to provide generation operated during PJM's annual peak hours in order to reduce transmission and installed capacity demands. The units will also be available to operate during hours when market prices are higher than the operating costs of the generators, as well as to provide emergency backup power if the grid goes down. AMP estimates the units will operate approximately 50 hours annually.

AMP owns the PowerSecure systems, finances their construction, and dispatches the resources. AMP evaluates members' systems and power profiles to see if their potential construction sites and power supply requirements make them suitable for the program. When qualified members sign on, PowerSecure prepares the sites, designs the installation, manages construction, and maintains and remotely monitors the units through both the 24/7/365 PowerControl and PowerSecure Service teams.

Additional AMP members have expressed interest in participating in Phase 2 as AMP prepares to get the expanded program underway.



# BENEFITS TO THE CUSTOMER

With PowerSecure's industry-leading reliability, PowerSecure's distributed generation solution provided:

- 1** Resiliency: The Behind the Meter Peaking Project provides generation operated during PJM's annual peak hours in order to reduce transmission and installed capacity demands, operates during hours when market prices are higher than the operating costs of the generators, as well as to provide emergency backup power if the grid goes down.
- 2** Return on Investment: Currently, the project divides approximately 70 MW of total generating capacity among participating members, and based on the participating AMP members share, a portion of the project costs are covered and an equal amount of the financial savings from peak shaving operations are returned to the customer.
- 3** Reliability: In the event of power disruptions, the ultra-clean power generator can be run in manual standby mode.

***“PowerSecure being able to provide a true turnkey solution is very important to us. Their ability to provide operational and maintenance support, as well as the fixed cost format, enables us to project future costs and return on investment.”***

- Paul Beckhusen, AMP's Senior Vice President of Power Supply & Energy Marketing