



PowerSecure

25 Years of Energy Resilience and Efficiency

PowerSecure Case Study Anthology

We believe reliable, resilient energy is essential to thriving economies and communities.

Our belief has guided PowerSecure for over 25 years as we've led the way in energy innovation, delivering resilient, efficient, and sustainable power solutions across the country. This anthology showcases a diverse portfolio of projects that reflect the company's commitment to empowering communities, institutions, and industries through cutting-edge microgrid technology, energy efficiency upgrades, and mission-critical infrastructure. From bustling airports and data centers to rural farms and military bases, PowerSecure's work has consistently demonstrated the transformative impact of reliable energy systems.

Each case study in this collection highlights a unique challenge and the tailored solution that PowerSecure implemented to meet it. Whether it's enabling a small town to achieve full energy independence, safeguarding healthcare operations during outages, or supporting the U.S. military's energy resilience goals, these stories illustrate how PowerSecure's expertise translates into measurable benefits in the form of cost savings, carbon reductions, operational continuity, and enhanced safety. The projects span sectors including retail, data centers, healthcare, manufacturing, government, and education, underscoring the versatility and scalability of PowerSecure's approach.

This anthology is more than a retrospective on 25 years of success; it's a testament to the power of partnership, innovation, and purpose-driven engineering. As the energy landscape continues to change with an increased demand for sustainability and growing demand, PowerSecure remains a trusted ally in building a smarter, more resilient energy future. We invite you to explore these stories and discover how PowerSecure is powering the way forward one project at a time.



Local Leaders

Birmingham – Shuttlesworth International Airport – Brighter, Safer, Smarter

A \$1.5M+ LED upgrade improved visibility and safety while saving over \$200,000 annually in energy and maintenance.

Borough of Berlin, PA – Small Town, Big Difference

A 3.75 MW microgrid now powers this New Jersey town with 100% backup and estimated savings of up to \$300,000 a year.

“The savings Berlin expects to realize from utilizing the generators during times of peak usage will enable our customers to continue to realize the lowest kilowatt-hour rate of any of the 35 Pennsylvania Municipal Electric Systems and of those charged by most Investor-Owned Utilities.”

- Tom Jones, Berlin Borough executive secretary

Bennettsville, SC – A Citywide Safety Net

PowerSecure designed and installed a 22.5 MW community microgrid for the City of Bennettsville, SC. It supports the entire city during outages and provides 100% standby power with 24/7 monitoring.

Butler Farms – Farming the Future

PowerSecure partnered with South River EMC and North Carolina's Electric Cooperatives to develop a microgrid at Butler Farms, integrating solar, biogas, diesel backup, and battery storage. This low carbon microgrid powers 28 homes and serves as a STEM education hub.

Fort Wayne Housing Authority – Breathing New Life with HVAC Upgrades

Outdated systems were swapped for efficiency air handlers with heat recovery wheels. Structural upgrades ensured long-term reliability and better indoor air quality.

South Florida City and County – Government Energy Efficiency

Energy upgrades to lighting, water systems, and transformers across multiple municipalities, including Miami-Dade County, saved 7,300 MWh and 4 million gallons of water each year while cutting costs by \$800,000+.



Butler Farms

Metropolitan Ministries – Powering Purpose

A 625 kW microgrid ensures 48 hours of backup power for this nonprofit that supports over 30,000 families year-round come rain or shine.

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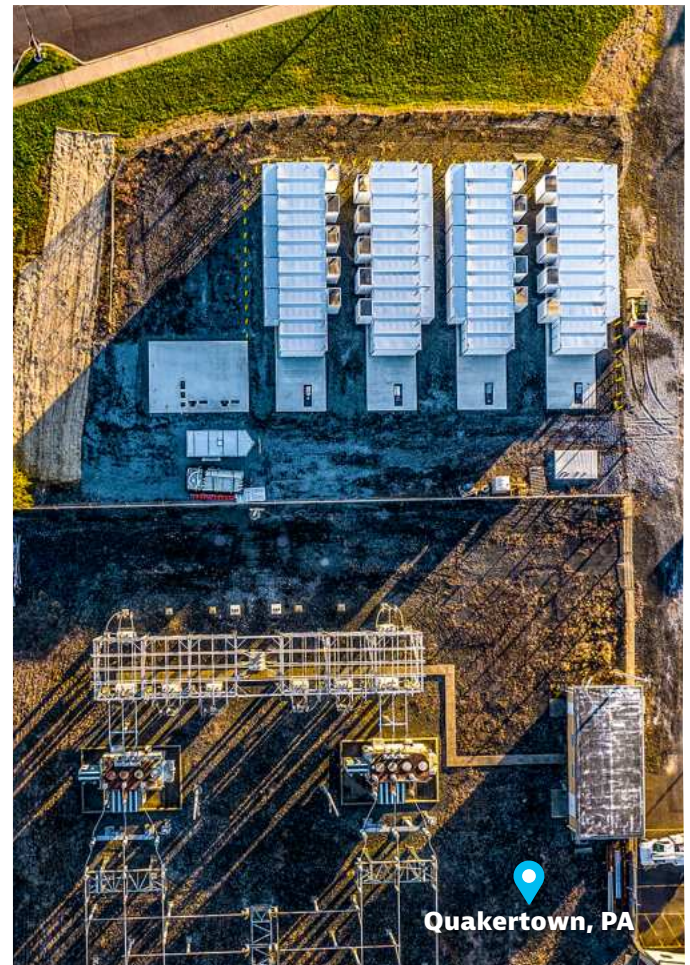
“An executive with a local architectural company, who is also a member of our board, suggested we contact PowerSecure, a company he’d worked with in the past with good results. There was a sense of relief during the final stages of generator testing, knowing our families and the community will be able to rely on us for support during any major natural disaster.”

- Mark Rios, Former VP of Real Estate,
Metropolitan Ministries

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Ocracoke Island – Smooth Sailing For Power

Rising summer energy demands and storm risks were calmed with a hybrid system combining generators, 15 kW of solar, 1 MWh of battery storage, and 175 smart thermostats to improve reliability, reduce costs and manage peak demand.



Quakertown, PA – Powering 28 Communities

As part of a broader AMP initiative across 28 communities, PowerSecure designed, installed, and monitors four Tier 4 PowerBlock®s totaling 12.5 MW, enabling better load management, emergency backup, and emissions improvement while helping reduce transmission costs and boost local energy resilience.

Reynolds Landing Smart Neighborhood – The Future of Home Energy

This 62-home community runs on a solar, battery, and natural gas generator microgrid and serves as a national model for residential energy innovation.

Education Centers

Memorial University of Newfoundland – Energy Smarts Across Campus

Efficiency upgrades, including lighting, HVAC and mechanical systems across 50 buildings saved 10.5 million kWh and \$1.6 million annually.

Georgia Tech – A Living Lab for Urban Energy Innovation

In Midtown Atlanta, PowerSecure built a 1.5 MW microgrid for Georgia Tech's CODA Center. With battery storage, a solid oxide fuel cell, and diesel and natural gas generators, it's a cutting-edge system ready for solar, EV charging, and whatever comes next.

Paterson Public Schools

PowerSecure implemented energy efficiency and infrastructure upgrades across Paterson Public Schools in Paterson, New Jersey. This system delivers high-efficiency HVAC systems, improved lighting, and healthier learning environments.

West Windsor-Plainsboro Regional School District – Energy Efficiency Upgrades

PowerSecure delivered extensive system upgrades across multiple schools in the West Windsor-Plainsboro School District including ventilators, air chillers, transformers and hot water heaters. Despite pandemic-related challenges, the upgrades improved system reliability, reduced energy and maintenance costs, and enhanced indoor air quality.



Data & Technology Centers

Advanced Microgrid – Resilience Meets Innovation

This advanced microgrid deployment protects the energy to a single 2,800,000 square feet building and integrates renewable energy, battery storage, and intelligent controls to deliver resilient, sustainable power for developing next generation technology.



Edged Data Center – Building the Future of AI-Ready Data Centers

Part of an ongoing relationship, this 169 MW AI-ready data center campus in Atlanta, features Tier 4 Final PowerBlock®, 24/7 microgrid monitoring and delivers scalable, efficient infrastructure designed to meet the growing demands of AI and cloud computing with high reliability.

PGA TOUR Studios – Powering the Game

3750kW of scalable Tier 4 Final backup power and PowerControl® management for real-time monitoring, ensures seamless broadcast continuity even during grid disruptions. This microgrid protects critical production systems and supports high-reliability operations across every screen of the 165,000 sq. ft. Florida facility.

Federal Government

Joint Forces Training Base in Los Alamitos, California – Microgrid Ready

PowerSecure, in partnership with Bright Canyon Energy (now Ameresco), developed an advanced microgrid to support the U.S. Army's goal of installing microgrids on every base by 2035. The project includes 26MW of solar power, a 20MW/40MWh battery energy storage system, and backup clean generation, ensuring 14 days of energy resiliency for critical missions during grid outages.

Fort Belvoir – Power Frequency, Controlled

At Fort Belvoir, PowerSecure upgraded the existing 9.75 MW backup generation system with 14 sections of 35 kV NexGear switchgear and controls. The microgrid ensures consistent frequency and uninterrupted power for critical defense and intelligence operations.

Marine Corps Base Quantico – HVAC Overhaul in a Day

Six new rooftop HVAC units, nearly twice as efficient, were installed with curb adapters, economizers, and full integration into the building automation system—all within an 8-hour window. The upgrade improved energy efficiency, reduced maintenance, and enhanced comfort and reliability.



Army West Fort Cavazos – 14 Days of Energy Independence

This 1.95MW natural gas distributed generation microgrid at West Fort Cavazos, covers 43 facilities, enables 14 days of energy independence and has the ability to provide \$125k in energy savings per day during any ERCOT peak demand periods.

Tinker Air Force Base – Lighting the Way to \$2.2M in Savings

With 67,877 LED fixtures and 2,132 controls installed, this upgrade saved 43 million kWh and \$2.2 million annually without ever disrupting aircraft maintenance.

General Services Administration – Federal Efficiency, Reimagined

New chillers, VAV systems, and transformer replacements modernized energy systems at the New Executive Office Building and Ronald Reagan Building in Washington, DC.

Utilities

Holyoke Gas & Electric – Resilience in Every Watt

Enhancing grid resilience and delivering monthly savings. The flexible microgrid can be operated to the full rating of 400 kW or as low as 50 kW in standby backup power mode and can come online fully within minutes.

American Municipal Power (AMP) – Behind The Meter

AMP partnered with PowerSecure to deploy Tier 4 Final PowerBlock® systems across 14 utilities, benefiting 27 communities. This behind the meter peaking project reduced transmission and capacity charges and provided valuable emergency backup power.

MCAS - Yuma and Arizona Public Service – 25 MW of Military Resilience

To solve frequency issues, APS and Marine Corps Air Station Yuma turned to a PowerSecure microgrid that delivers 100% standby power, autonomous frequency control, and peak load management—keeping the entire installation mission ready at all times.

"Marines need to train and hone their skills on the base, and that can't be interrupted by natural disasters, attacks or anything that might cause the energy supply to this base to go down. This project is vital to our contribution to national security, and that's not an overstatement."

- Major General John Broadsmeadow, commander of Marine Corps Installations Command



Retail & Logistics



Southeastern Freight – Brighter, Safer Warehouses

LED upgrades doubled illumination, improved safety, and saved up to \$800 monthly—plus \$26,000 in rebates.

Rouses Market – Always Open, Always Fresh

Becoming a beacon in the storm, our microgrids continue to keep these grocery stores running during outages, protecting food safety and customer service.

AmerisourceBergen – Powering the Supply Chain

Resilient energy systems to support AmerisourceBergen's pharmaceutical distribution operations, ensuring uninterrupted supply chains and healthy lives.

Manufacturing

Cargill – \$1M+ in Annual Savings

This 10 MW microgrid system at Cargill's Springdale, Arkansas protein facility enables island mode operation and real-time generator control, which results in over \$1 million in annual savings.

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"In 2009, when an ice storm hit Northwest Arkansas and Kentucky, knocking out power for millions of customers, Cargill ran their generators for six days straight in order to keep producing. We were the only facility in this area to continue processing products. If the plant had been closed for those six days, it would have cost about \$1.2 million."

- Jim Edwards, Cargill engineering manager

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Dyneema – Industrial Strength Energy

This 7.2 MW natural gas system boosts reliability and supports economic growth by powering the polyethylene fiber production 24/7.



Healthcare

Reid Health – Resilience That Saves Lives

A 3.75 MW Tier 4 PowerBlock® microgrid ensures 100% backup power, cuts CO₂, and saves an estimated \$625,000 annually.

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“We had a huge power outage from the grid yesterday that affected about 5 counties in Indiana and Ohio for about 2 hours. The CAT’s (my EPSS) came up and took the load as they should. PowerSecure system started and held open the utility breakers in the PS line up for 1 minute delay I had Kyle put in during testing and then paralleled with the CAT’s as we wanted and closed to both sources in my MV lineup restoring “utility”. CATs held the load for 5 minutes after “utility was restored” like they are supposed to and then PS did the closed transition and held the load for the remainder of the outage. Re-transfer back to utility was flawless in the closed transition. So, our first trial by fire was a success!!”

- Jeff Cook, Director Engineering, Reid Health

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WellSpan York Hospital – Powering Critical Care

A 7.5 MW microgrid with N+2 redundancy keeps care uninterrupted while saving this facility over \$2 million versus traditional systems.

Florida Rehab Hospital – Coastal Resilience in Action

A 2.25 MW microgrid provides 80+ hours of backup, integrated with utility load management and 24/7 monitoring to maximize benefit.

VA Integrated Service Network 7 – Serving Those Who Served

When seven Veterans Affairs facilities needed energy solution upgrades, we ensured reliability and unencumbered patient care every step of the way.



Here's to 25 more years of Innovation

As PowerSecure celebrates 25 years of innovation and impact, this anthology stands as a tribute to the communities, partners, and people who have made this journey possible. From small towns to sprawling military bases, PowerSecure has remained steadfast in its mission to deliver energy solutions that not only power infrastructure but also empower lives. These stories reflect more than technical achievements; they represent a legacy of trust, resilience, and shared progress. As we look to the future, PowerSecure remains committed to serving with the same passion, purpose, and partnership that have defined the past quarter-century.

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