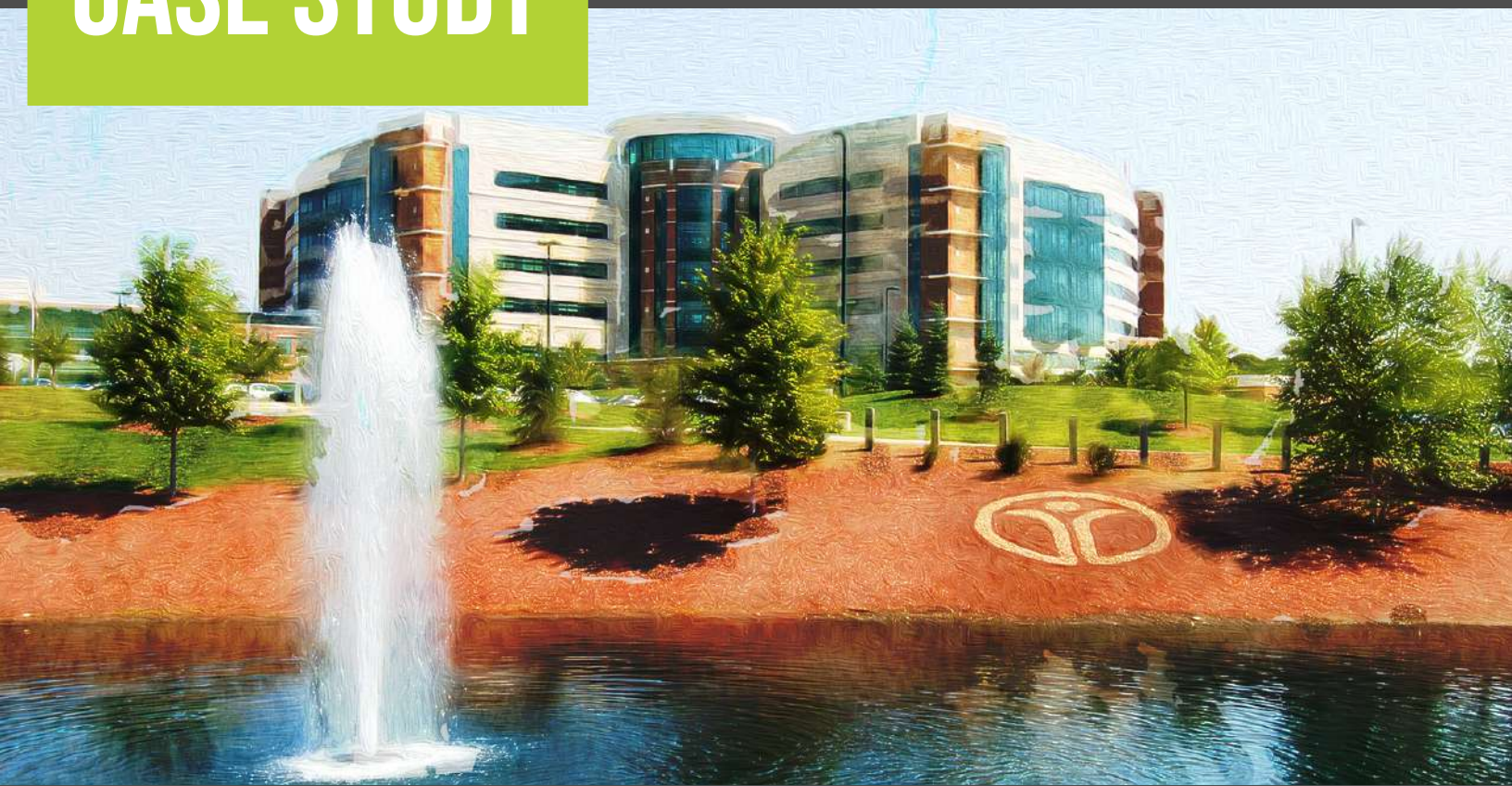


CASE STUDY



REID HEALTH **MICROGRID**

LOW-CARBON SOLUTION FOR
A DIVERSE MICROGRID

ABOUT THE CUSTOMER

Reid Hospital first opened in 1905 to provide healthcare options in Richmond, Indiana for patients that previously had access only to treatment in their homes. Today Reid Hospital and Health System, a Level III Trauma Center, continues to provide nationally recognized quality and technology with a personal touch to communities in the area.



THE CHALLENGE

Reid Health confronted challenges stemming from escalating energy costs and financial constraints within the healthcare industry. To address these issues, they embarked on a quest for a sustainable, long-term solution to manage and reduce their energy expenditures. This initiative aimed to optimize energy usage efficiently while meeting the operational needs and budget constraints of a healthcare facility.

Through the implementation of strategic energy management practices and exploration of renewable energy sources or energy-saving technologies, Reid Health aimed to curb energy costs and enhance overall sustainability amid economic pressures and industry challenges. This proactive approach demonstrated their dedication to achieving cost savings and environmental responsibility over the long term.

THE SOLUTION

The installation of a Tier 4 final EPA certified Microgrid by PowerSecure at Reid Health represents a significant stride in enhancing the facility's energy resilience and sustainability. This Microgrid, with a capacity of 3.75MW, ensures the availability of clean and reliable power throughout the facility. The Tier 4 final EPA certification underscores the system's adherence to stringent environmental standards, affirming its eco-friendly operation.

By integrating this Microgrid, Reid Health has achieved full facility resiliency, enabling continuous and uninterrupted power supply even during grid disruptions or outages. This capability is vital for healthcare facilities, where uninterrupted power is critical for patient care, medical equipment operation, and overall operational continuity.

The Microgrid's implementation aligns with Reid Health's long-term strategy to manage energy costs and enhance operational

efficiency while reducing environmental impact. It reflects a forward-thinking approach to energy management and resilience, demonstrating a commitment to sustainability and reliability in healthcare service delivery. This project showcases PowerSecure's expertise in providing tailored energy solutions that meet the unique needs of critical infrastructure, ensuring reliable, efficient, and environmentally responsible power supply.



BENEFITS TO THE CUSTOMER

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

The successful implementation of the Microgrid at Reid Health has yielded significant results, including enhanced energy resilience and notable cost savings. By providing 100% standby power coverage, the Microgrid has reduced reliance on Tier 2 generators, thereby decreasing carbon dioxide (CO₂) emissions associated with traditional backup power generation.

Moreover, the financial impact has been substantial, with estimated savings totaling \$625,000 per year based on 160 hours of operation. This reduction in operating costs reflects efficiency gains and decreased reliance on conventional backup systems, highlighting the economic benefits of investing in advanced energy solutions like Microgrids.

Overall, these outcomes underscore the Microgrid's effectiveness in optimizing energy usage, reducing environmental impact, and generating substantial cost savings for Reid Health. This success story exemplifies the value of innovative energy technologies in healthcare facilities, providing operational benefits and tangible financial returns while contributing to sustainability objectives.

"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