

POWER SOLUTIONS

CASE STUDY



COMMUNITY HOSPITAL OF WATERVLIIET

Location

Watervliet, Michigan

Market

Health Care

Unique Obstacle

Provide back-up power to a hospital with approximately 65 beds, as well as an emergency room, surgical site, critical care unit, birth center, radiology lab and rehabilitation center

Units

750 kW Gemini® Twin Pack Diesel Genset

Solution

750 kW Gemini twin pack genset. 2 x 375 kW generators in one enclosure. Provides built-in redundancy and twice the reliability of a traditional single engine generator

Contact

Readers who may have similar application challenges and would like to discuss this success are invited to call 1-844-ASK-GNRC (1-844-275-4672)

The Power to Save Lives at a Community Hospital

There's no business more important than providing health and patient care. In southwestern Michigan, the Community Hospital of Watervliet was founded in 1949 as a regional health care provider, and today serves more than a dozen communities. As one of the primary hospitals in this area, it is responsible for offering routine and emergency health care around the clock, 365 days a year.

The hospital employs approximately 350 people and offers a broad array of inpatient and outpatient services. The four-story building, constructed in 1979, includes approximately 65 beds for patients, as well as an emergency room, surgical suite, critical care unit, birthing center, radiology lab, and rehabilitation center. A ground level heliport is located near the emergency room for critical care patients needing helicopter transport.

“*The In the event of a major outage, we're fully prepared,” said Don Englehardt, hospital facilities manager. “With the fuel we have on-site, the generators can operate for the better part of a week without interruption, powering the entire hospital.*”

To ensure that their facility will have full power in the event of a utility outage, the hospital's board of directors invested in a 750 kW Gemini® Twin Pack genset from Generac Power Systems. This diesel-powered unit is actually two 375 kW generators in one enclosure, designed to operate in parallel. This dual genset arrangement provides built-in redundancy and twice the reliability of a traditional single engine generator, since each genset backs up the other. If one is undergoing maintenance or doesn't operate for some reason, the second genset will provide coverage of the load up to 375 kW, which is sufficient for all of the hospital's critical load, as well as most of its operations.

The Gemini® solution was recommended by Glenn Emmert of Wolverine Power Systems, the Generac industrial dealer based in nearby Holland, Michigan. “We consulted with Glenn and were very satisfied with his approach,” says Don Englehardt, the hospital's facilities manager. “He showed us the advantages of the Gemini product and how it was also the most cost effective choice. Glenn worked with us throughout the process. For us, it was basically a turnkey operation.”

The system was installed in February, 2004 by Parkway Electric & Communications, a local electrical contractor with experience in connecting standby power equipment. Parkway coordinated the connection work

CASE STUDY: COMMUNITY HOSPITAL OF WATERLIET

with the local utility, American Electric Power, and integrated the generator with the hospital's uninterrupted power supply (UPS) battery system.

Once the new genset was in place, it wasn't long before it was called into service. "We actually ran the entire hospital on the generator for more than three hours while the utility changed transformers in our area," Don Englehardt says. "The system has also worked well during a few short outages we've had since it was installed."

For every hospital, backup power is imperative, ensuring that emergency and life safety systems will remain fully operational anytime utility power is lost. But a reliable and redundant backup system also provides tremendous peace of mind to hospital administrators and facility managers.

"In the event of a major outage, we're fully prepared," Englehardt notes. "With the fuel we have on-site, the generators can operate for the better part of a week without interruption, powering the entire hospital. This system gives us much more flexibility than the one it replaced. Our administrative team and the hospital's board of directors were visionary in initiating the purchase of this equipment for the well-being of our patients and staff."