

POWER SOLUTIONS

CASE STUDY



GEORGIA STATE OFFICE BUILDING AND DATA CENTERS

Location

Atlanta, Georgia

Market

Data Center

Unique Obstacle

Ensure data center uptime while also powering the rest of the building during an outage

Units

1500 kW Modular Power Systems
(1-400 kW + 1-500 kW + 1-600 kW Diesel
Gensets in Parallel)

Solution

A modular power system (MPS) to match
the needs of the building in different ways

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)

Modular Protection Around-the-Clock

The State of Georgia's Beta Building is a bustling office on the northwest side of Atlanta. It's a five story edifice built in 1972, with over 101,000 square feet of space. This facility is the headquarters of the state retirement program, housing a variety of offices and three data centers devoted to the files, administration, and activities of that department. Approximately four hundred employees work each day in this building, the majority of them affiliated with the state teacher's retirement program.

Inside the heart of the Beta Building are three computer data centers, one of which is classified as a critical facility. Data processing and record keeping activities go on around the clock, and require a reliable 24 / 7 power backup. Providing the standby power for this building is a 1500 kW Modular Power System (MPS) from Generac Power Systems.

The Georgia retirement system's MPS is comprised of three individual units — a 400, 500 and 600 kW genset working in concert to produce 1.5 megawatts of power. Together, they provide backup power for the entire building, including the data centers, elevators, cafeteria, lighting systems, and office outlets.

"The backup generators help us keep the data centers running, but also ensure that the rest of the building operates during an

outage, as well," says Bill Carter, building manager. "We have a lot of elderly visitors here each day, so it's essential that the elevators and lights continue to work all the time, for safety and security reasons."

The flexibility of the Modular Power System was a primary reason for its being selected, according to Carter. "Having the three generators with different outputs allows us to match the needs of the building in different ways. For instance, if the power goes out on a weekend when most of the offices are unoccupied, the 600 kW unit by itself is enough to meet the requirements of the facility without activating the entire backup system, as would be necessary with a single 1500 kW generator. Since the generators were installed we've had two outages of more than an hour each, and the system performed just fine for us."

Tim Bush of Kraft Power, the Generac dealer involved in this process, was originally asked to provide a price on a 1500 kW single engine generator proposal. "As part of an upgrade in facilities, we were asked to quote a Generac single engine alternative to a similar bid from Cummins," Bush says. "Knowing the advantages of the Modular Power System, I proposed an MPS solution, and that idea was well received. Generac even quoted the job four ways — offering a single 1.5 MW unit,

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and modular systems comprised of three 500's, four 400's, as well as the 400 / 500 / 600 arrangement that was ultimately chosen. The MPS solution was significantly less expensive than the large unit alone, and the facility now has the added advantage of redundancy. The installation cost was quite reasonable, and all three generators were shipped on a single truck, so that was just another factor that helped us keep our quote as competitive as possible."