

### POWER SOLUTIONS

# CASE STUDY



### HIGHWOODS PROPERTIES

#### Location

Glen Allen, Virginia

#### Market

Corporate Headquarters and Data Center

#### Unique Obstacle

Seeking redundancy and scalability in a backup power solution, that is also cost effective

#### Units

2000 kW Modular Power System  
5 x 400 kW Diesel Gensets in Parallel

#### Solution

Generac MPS system featuring 5 gensets with the capability to add a sixth one in the future

#### 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)

## MPS A SOLUTION FOR STANDBY POWER

For many large applications requiring significant amounts of backup power, Modular Power Systems (MPS) is a superior solution to traditional standbys that are more costly and complex. Generac's digital control system and onboard paralleling technology allow the output of multiple generators to be paralleled and combined in a reliable, cost effective manner that is suitable for large projects requiring up to 6000 kW of standby power.

Those who have specified, purchased and installed MPS products—consulting engineers, end users and electrical contractors—are aware of the many advantages, which makes expensive, stand-alone switchgear systems obsolete. At considerable cost savings, providing built-in redundancy, higher reliability and greater flexibility.

Two advocates of the Modular Power System are Nelson Dawson of Facility Support, Inc., a data center design / build firm, and Bob Warwick of Arc Electric, a design / build electrical contractor. Their companies worked together to configure and install a Modular Power System to provide backup power at two office buildings owned by Highwoods Properties, one of the premier property management firms in the Southeast. As a forward-looking building owner, Highwoods equips a number of its properties with backup power to provide enhanced service to its tenant companies. In this instance, the buildings were at the new corporate headquarters of Saxon Capital, a leading residential mortgage lending and servicing company.

As plans progressed for Saxon's offices, call center and data processing operation, Arc Electric became involved as the design / build contractor. After consideration of the customer's needs, Arc's president and engineer, Bob Warwick, conferred with Nelson Dawson, president of Facility Support, and Lee Newton of Bay Diesel & Generator, the local Generac dealer, to assess alternatives and recommend the best, most cost effective standby power system.

According to Dawson, Saxon's highest priority was reliability, one of the strong points of the Modular Power System because of its redundancy. "The traditional approach using a large single genset was not the best answer, nor was a paralleled system that included expensive switchgear. As a simpler and more cost-effective solution, we recommended an MPS featuring five 400 kW units, with the capability to add a sixth one in the future. That was the system ultimately chosen. This arrangement also gave Saxon smaller, more attractive generator packages, which they preferred."

Bob Warwick liked the MPS solution the first time he saw it. "I became a believer when Nelson arranged a demonstration of the Modular Power System at World Access in Richmond, a project he had previously designed and built," Warwick says. World Access is a leading provider of travel assistance, insurance and healthcare products, with mission critical data processing operations at its corporate headquarters. "The facility manager turned on the system and we watched the

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generators start up and parallel in a matter of seconds, without switchgear. With the paralleling capability and redundancy built into its system, Generac's modular approach really made sense for our project."

According to Warwick, the redundancy of the MPS system is one of its best features. "With a single large unit, if the generator doesn't start, you've got no power at all. With multiple MPS units, if one is not operating, the others will still be able to power the most important circuits."

The scalability of the Modular Power System makes it easy to accommodate growth, another factor important to Saxon. The infrastructure (distribution panels, conduits, pads) was constructed with capacity for a sixth MPS genset, which will be simple to add to the existing system.

For this project, the quicker delivery of Generac's MPS modules was also a plus, Bob Warwick says. "Large units from other manufacturers had lead times of up to 36 weeks. We were able to get the Generac MPS delivered and installed in less than 12 weeks. Generac was super to work with and Rob Robins of Bay Diesel & Generator really made the process go smoothly. Because of the versatility of the modular concept and its advantages, MPS is the superior solution for projects like this."