



Comprehensive Energy Systems Position Hospitals for Greater Success

Imagine this scene. Lightning strikes a rural hospital late at night, completely cutting off all electricity to the facility. At that moment, two operating rooms are in use. A woman is going into the obstetrical delivery room. A dozen patients are on life-support systems and several families are stuck in two elevators between floors. All the lights are out.

This can and has happened, with tragic outcomes. Although the lightning strike can't be prevented, the tragic outcome can be. Global Power Technologies (GPT) helps hospitals and healthcare centers prepare for just this kind of emergency by designing and installing systems that monitor, test and document performance of backup generators and controls in healthcare facilities. Such comprehensive monitoring systems allow operations teams to pinpoint failure quicker and act decisively to restore power and prevent any tragedies. At GPT client Gwinnett Medical Center in Lawrenceville, GA, it's lifesaving through expertise and preparation.

More than 21,000 U.S. hospitals are governed by regulations from the Joint Commission, an independent, not-for-profit organization whose accreditation and certification reflect a hospital's commitment to meeting certain performance standards. Those standards cover everything from design, maintenance and testing of the generator and backups with one goal in mind: to maximize the reliability of a hospital's emergency standby power system.

Having a standby system in place is not enough. It has to work flawlessly, every time. That's where GPT becomes an invaluable partner with hospitals. At Gwinnett Medical Center, for example, GPT customized the power monitoring system software that automates the required monthly and annual testing. Every hospital is different, so the software had to accommodate the specific design of Gwinnett's generation and backup systems.

What can cause a system to fail? Many things. The batteries needed to fire up the standby generator might be too weak. The diesel fuel feeding the generator might be too old. The numerous switches that transfer the emergency power to the vital hospital equipment may not function properly. The auxiliary generator itself might not be powerful enough to service a 100 percent load in an emergency.



Not only does the system have to work, it has to come up to speed within seconds. Delay can be deadly.

GPT's custom-fit software monitors the hospital's system 24/7, silently testing for weaknesses. Think of the dashboard lights in your car. If the fuel is low or the battery weak, the driver is alerted. So it is at hospitals with sophisticated monitoring and testing emergency power systems designed by GPT.

During the monthly and annual tests, when the actual operation of the backup system is tested, the software generates numerous performance reports for operators. These reports show the safety margins for all parts of the system. Troubleshooting can be done faster and more effectively as the hospital strives to be emergency-ready at all times.

To design a monitoring system at Gwinnett Medical Center, GPT had to integrate equipment from various manufacturers and suppliers. Its customized software has to process enormous amounts of data in order to isolate the flaws in the system and recommend corrections.

Like the hospital itself, Global Power Technologies is in the business of saving lives, one backup system at a time.