



Plug and Play SCADA Rack for Wind Farms



Situation

A large wind turbine manufacturer uses proprietary supervisory control and data acquisition (SCADA) software to manage and monitor the productivity of its turbines. In order to collect, analyze, and store this data, it also provides one server rack of equipment for every 200 turbines (maximum) deployed.

The company originally ordered, integrated, and configured these racks internally – a costly and labor-intensive process. The systems were usually more robust (and consequently more expensive) than necessary and varied from site to site. The project manager decided to look for an outside source that could design and deliver a more consistent solution at a lower cost.



Solution

Using the customer's specifications, FoxGuard developed a streamlined design based on common off the shelf (COTS) components. This allows the customer to rely on the hardware manufacturers for support. FoxGuard assembles the rack with four servers, a fiber optic kit, battery back-up, tape back-up, hard drive back-up, and a rackmounted monitor and keyboard. FoxGuard also does all of the cabling between the components and verifies that they function properly.



When the hardware portion is complete, FoxGuard installs and licenses all required software. This includes site-specific software that the customer designates per wind farm installation. All hardware manuals, CDs, and registration keys are compiled in a single binder that is shipped with the rack. When a rack arrives on site, it is ready to plug and play

Moving Forward

Foxguard maintains revision control of the entire system so that the customer can rely on a stable, consistent platform for years to come. As the demand for wind energy rises, this turbine manufacturer will be able to depend on FoxGuard to deliver the SCADA solutions it needs.