



Prison Slams the Door on Delinquent RTUs...and Chooses Reliable S&C Automatic Switch Controls

S&C Featured Solution: S&C's Power Systems Solutions

Location: Oklahoma, United States

Customer Challenge

An expansion project at a federal prison facility in Oklahoma called for the construction of several new buildings and an upgrade to the existing medium-voltage distribution system. The existing system included nine units of S&C Remote Supervisory Pad-Mounted Gear; three additional units were to be installed as part of the upgrade.

The existing gear was equipped with customer-specified remote terminal units that never fulfilled performance expectations. These RTUs were to have permitted remote operation of the gear and provide real-time data from a master station but did not do so. More reliable supervisory control was sought during the expansion project to ensure the distribution system could be transferred to a second utility source in the event the primary source was lost.

S&C's Power Systems Solutions division was called upon to find an answer.

S&C Solution

S&C's Power Systems Solutions developed a cost-effective solution that included all equipment and services needed for reliable remote supervisory control of the facility's medium-voltage electrical distribution system. It included:

- Upgrade kits for the existing S&C Remote Supervisory Pad-Mounted Gear, featuring S&C Automatic Switch Controls
- Installation of the upgrade kits
- New S&C Remote Supervisory Pad-Mounted Gear equipped with S&C Automatic Switch Controls
- Communication engineering and equipment
- A new SCADA master station
- System commissioning and testing
- All related engineering and project management services required to fully implement the new system

Results

The electrical staff of the facilities can now readily reconfigure the appropriate switches of the pad-mounted gear from the control room of their power house. The process requires only five seconds to complete. (It had taken at least 30 minutes to reconfigure the switches manually.)

A master station supplied by Subnet Solution's Substation Explorer makes it easy for the electrical staff to check real-time voltage and current measurements as well as check for faults and tripped alarms.

