

Ventilation Shaft Control System Upgrade Project

Transportation agency upgrades control system for operation of equipment in ventilation shafts at various locations.

Main Objective

The customer is upgrading their control system for ventilation shafts at several locations in a major metropolitan area. MAVERICK was selected as the systems integrator to provide a complete SCADA system including panel design, panel fabrication, PLC programming, communication interface and startup support.

Customer Results

Following completion of engineering efforts, the system was thoroughly tested by the customer before delivery to site. MAVERICK engineers provided comprehensive testing of the control system by simulating system functionality during factory testing. Once the control system was installed on site, MAVERICK worked with the customer and other contractors to thoroughly test the system functionality to ensure compliance with the specifications through a detailed testing process.

The system was commissioned and successfully placed into operation, on time and on budget.

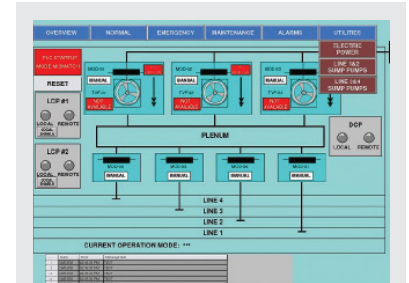
Application Description

Control System: Fully redundant Siemens S7 programmable logic controllers were designed and configured to meet the specified requirements of this system. The system consists of redundant processors, distributed I/O through a profibus network and serial interface to other systems with Modbus protocol. Graphical displays were developed for system interface.

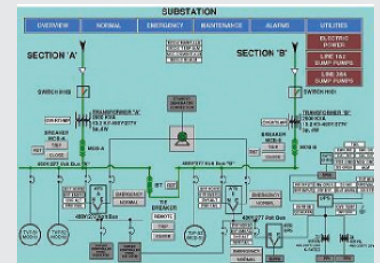
Control panels were designed and fabricated to house the control equipment, UPS and communication equipment. The system included two redundant control panels with local I/O, four remote I/O control panels, two UPS panels and four local control panels for local operation of equipment.

Design documentation was generated to clearly illustrate the panel components, wiring installation details and network architecture for installation reference and troubleshooting upon customer acceptance. Complete operation and maintenance manuals were generated, containing drawings, documentation and specifications.

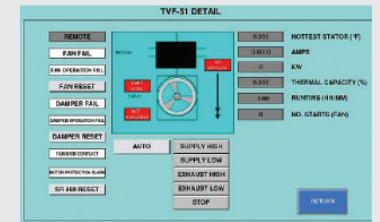
Training was provided to operators and staff, which supported the quick commissioning.



System Overview



Detail



Detail