Tokat GOP University Hospital: Tokat, Turkey

Eliminating PLCs Cuts Failure and Fallout Risks Further

The solution reliably supports the operation of the hospital and the health of our patients. We are extremely happy with it.

Because customers in mission critical businesses and services in the banking, telco and health sectors rely on safe, proven emergency power solutions, they prefer complete systems from one supplier.

Across Turkey, DEIF's critical power solution has become the dominant standard in the health sector thanks to the capacity and proven reliability of our controllers and systems.

Application Challenge

Unique to Turkey, for emergency power solutions the Turkish Ministry of Health requires a single line diagram using a Load Tie Breaker (LTB) instead of a Bus Tie Breaker (BTB).

This challenge also applied to the solution DEIF was requested to develop for Tokat GOP University Hospital, taking into account the conditions of a power plant made up of three different generators (2250+1100+550kVA) with a total power rating of 4000kVA.

The existing setup had grown over time and in steps and had an outdated control and monitoring system that was almost exclusively manually run.

DEIF was asked to provide not just the controllers for the system but also a SCADA solution.

Tokat GOP University Hospital

Located in the Black Sea region of Anatolia, the city of Tokat has a population of 593,990. Tokat GOP University Hospital was established in 1999, but moved into new facilities in 2010. The hospital has a 500 bed capacity, with 80 intensive care beds and eight surgery rooms.











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Data

- ✓ Increased reliability
- ✓ Complete solution including SCADA
- $\checkmark\,$ Fast response and solution delivery
- ✓ Flexibility and customisation



Automatic Genset Controller, AGC-4

THE DEIF SOLUTION

Usually, the LTB can be controlled by a PLC only, but to meet the Turkish regulations DEIF developed a new version of its standard software enabling the DEIF controllers with the added functionality - without the need for PLC. Notwithstanding the saved PLC costs and the need to integrate added devices creating increased system complexity, DEIF's integrated software change also increases reliability, cutting risks of failure and power fallouts even further.

Demonstrating superior engineering expertise, technical flexibility and its dedication to customer satisfaction, DEIF conceived the integrated software change and developed the new solution in record time. DEIF's critical power solution has replaced manual with automated operation controlled from a PC. System functionality includes load sharing and returning to main power utility without interruption of power: the system synchronises the generators with main power with a smooth transfer of load to grid.

Case Diagram

