Case Study: 220/400 KV Substation Automation

Provider Name : KALKI Communication Technologies (P) Ltd.

Client Name : Multinational Utility Automation OEM

Project Title : 220/400 KV Transmission Sub-Station Engineering and Commissioning

The Requirement

The client, a Major Utility Automation Multinational required for their 220/400 KV Sub-Station Automation project, SCADA Engineering and Commissioning Support. Kalki engineering services group, sat with the client team to understand the specifications and carried out the design, development, RTU Field drawings, SLD creation and tag database creation, and commissioning and hand-over at site.

The Solution

The following Resources were utilized to carry out the Engineering and Design tasks:

1. ABB MicroSCADA as Sub-Station SCADA System
2. ABB Bay Control Units
3. Line Protection Units
4. ABB Transformer Protection Relays
5. Tap Changers
6. Energy Meters

The said SCADA platform runs on NT System. The SCADA was configured in Hot-Standby mode. The SCADA performed local control and monitoring. Also, the SCADA system was connected to the Load Dispatch Center over IEC 60870-5-101 protocol over VSAT network.

Kalki Engineering Services group carried out the entire engineering, FDS preparation, FAT approval, Erection and Commissioning activities at site and eventual hand-over.

Tools Used:

- OEM Sub-Station SCADA Software
- IEC 60870-5-101 Test Toolkit Simulator
- NT Operating System Utilities for service management