Replacement of SG & Common Control System of Sipat St-I (3 x 660 MW)

SALIENT TECHNICAL FEATURES:

The Replacement of SG & Common Control system of Sipat Stage-I(3X660MW) package of Sipat super thermal power station is intended for the procurement of the equipment and systems for the control, protection, operation and monitoring of the Main plant SG including some of the common systems and offsite areas.

The control system, called Distributed Digital Control Monitoring & Information system (DDCMIS) envisaged consist of the following sub-systems:

1. SG DDCMIS (One set for each generating unit) consisting of following sub systems:
   a) SG System (Burner Management System/FSSS including Boiler Protection, APRDS and Soot blower controls (SBC)).
   b) Mill Reject System

2. COMMON DDCMIS (one set common for all generating units) consisting of controls of IAC/PAC and St-I MRS compressors.

3. FOPH DDCMIS (one set common for all generating units) consisting of control system of Fuel Oil Pump House of St-I.

Its Human Machine Interface & Plant Information System (HMIPIS) is based on Operator Work Stations (OWS). These devices through customized user-friendly displays, soft alarm facia and pop-up displays are used for giving fast pin-pointed faults/ status to the operator. The total system is networked through a SG Station-LAN. Master Slave clock system for time synchronization and Cyber Security suite for DDCMIS with associated hardware and software. The alarm annunciation is also implemented as a part of DDCMIS system.

Measuring instruments (such as Temperature transmitters), Special Enclosure for mounting temperature transmitters etc are also included under this package.

Control Cabinets/panels, furniture have also been included in the scope of work.

LT Power cables, LT Control Cables, instrumentation cables, OFC cables and erection H/W are envisaged under the scope of work.

The scope of work also includes modification/dismantling/rectification in existing system/ equipment, installation of some of the cable trays, 3 years AMS for DDCMIS, Upgrade/update all DDCMIS system along with SG Station Lan in the penultimate year of AMS, mandatory spares, Tools and tackles and training for employer personnel's etc.