

## REPLACEMENT OF PRO CONTROL P14 SYSTEM OF ANTA GAS POWER STATION

### SALIENT TECHNICAL FEATURES:

The Replacement of Pro Control P14 System of Anta Gas power station package is intended for the procurement of the DDCMIS for the control, protection, operation and monitoring of the BOP control system as detailed below.

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

1. BOP DDCMIS consisting of following sub systems:
  - a. Steam turbine : HP & LP bypass control, Hot well level control, De-aerator level control, Sequence control (GC & SGC), BFPs, CEPs, Lube oil system, hydraulic oil system, vacuum system, Equipment cooling water (ECW / DMCW), auxiliary raw cooling water (ACW / ARCW), drain system, condensate pre heating, barring system etc.
  - b. Boilers (WHRB-1,2 & 3) : HP & LP Drum level control / FRS, Sequence control (GC & SGC), flue gas damper control, Live steam system drain system, HP & LP circulation pumps, main steam and bypass steam valves, APH etc.
  - c. Electrical system: Switchyard breakers / isolators (seven 220 KV lines), incomers & bus couplers and common electrical system etc.
  - d. CW / CT system: CW (cooling water) system and CT (cooling tower) pumps system
  - e. Other Common system: Naphtha forwarding system, raw water system, make up water system, service water system etc.

Its Human Machine Interface & Plant Information System (HMIPIS) is based on Operator Workstations (OWS) and Large video screen (LVS). 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 Station-Wide LAN for use of real time data of various plant areas by other users like maintenance, planning, efficiency enhancement groups etc. with adequate security policies. The alarm annunciation is also implemented as a part of DDCMIS system. Control Cabinets/panels have also been included in the scope of work.

The scope of work also includes modification/dismantling/rectification in existing system/ equipment, installation of some of the cable trays, AMC for DDCMIS, mandatory spares, Tools and tackles and training for employer personnel's etc.