

OVERALL SERVICES

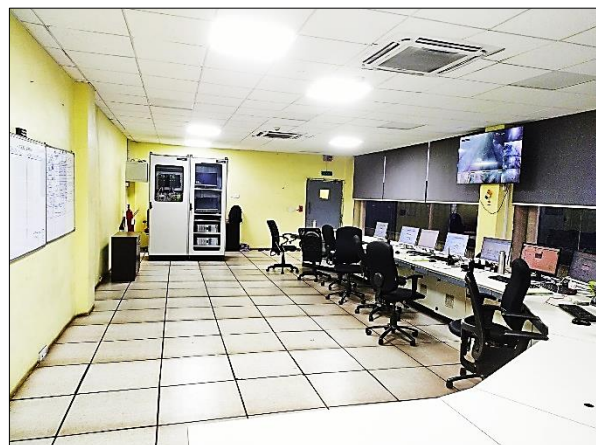
OF ELECTRICAL ENGINEERING & CONTROL SYSTEM

Grafix provided electrical engineering services for power distribution, utilities, control operations associated with all the listed major projects undertaken by them; major items therein:

- ◆ Outdoor Switchyard up to 132/33 kV, 2 x 40 MVA
- ◆ Outdoor Transformers 33/11 kV, 33/6.6 kV up to 25 MVA
- ◆ Indoor Substations with 33 kV, 11kV, 415V and 690V Switchgear
- ◆ Distribution Transformers 11 kV/433 V up to 1600 kVA
- ◆ Converter duty Transformers 11kV/690-690 V, 6.6 kV/690-690 V up to 4000 kVA
- ◆ 690V VFD and Motors for Variable Speed Conveyors up to 1750 kW
- ◆ Central Control Room for Central Control and Supervisory System with redundant fiber optic network and Remote Units for Conveyors, Berths Ship Loading, Ship Unloading, Stockyards Stacking, Reclaiming, Wagon Unloading, Wagon Loading Systems operations.



Indoor Substation Switchgear Room with 33 kV and 6.6 kV Panels



Central Control Room with Operating Stations and HMI Screen