



CMRL AWARDS ELECTRIFICATION CONTRACT **TO SIEMENS CONSORTIUM**

Chennai Metro Rail Limited has awarded the contract for Power Supply and Overhead Equipments (OHE) to Siemens AG, Germany and Siemens Limited India Consortium at a cost of Rs.305 crores. This contract includes design, supply, installation, testing and commissioning of complete power supply systems. The contract has been awarded on international bidding to the eligible bidder who has quoted the lowest rate.

CMRL will receive electrical power from Tamil Nadu Electricity Board for a maximum demand of 60 MVA from three 110 kV sub-stations being set up by Electricity Board at Koyambedu, Alandur and Chennai Central. Three traction sub-stations will be set up under this contract to step-down the voltage from 110 kV to 25 kV AC single phase for use for the traction purposes. 25 kV AC traction power will be supplied to train through OHE to be installed along the track. In the elevated corridor, catenary type OHE as used in Railways and in tunnels rigid contact system are proposed. CMRL has selected 25kV AC traction (in preference to 750 V DC third rail system), in view of the energy efficiency, safety and reliability.



This contract also provides setting up of three auxiliary sub-stations at Koyambedu, Alandur and Chennai Central to step down the 110 kV to 33 kV for supply of power to stations, air-conditioning systems, tunnel ventilation systems, lighting and other utilities at the stations. The sub-stations will be of gas insulated ones for higher reliability and maintenance friendly.

The 33 kV auxiliary power supply is distributed through a ring main system to all stations for auxiliary power supply loads. In the event of power failure of any receiving / traction / auxiliary sub-stations, uninterrupted power supply is ensured by feeding from adjacent receiving / traction / auxiliary sub-station for traction and other essential loads of the station. Further, each station is equipped with standby diesel generators of adequate capacity as a backup power source.

The entire power supply system can be monitored and controlled through Supervisory Control and Data Acquisition system (SCADA). The remote operation can be managed from centralized operation control centre located at Koyambedu.

Besides setting up these facilities, the contract provides for comprehensive maintenance till end of defect liability period of 2 years after the completion of the project.



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