



METRO RAIL

IceCube is a leading Engineering Design Services and EPC Contracting Services provider for Electrical Engineering and Instrumentation & Control Engineering. Our parent company Elecmech Group is an established player in Engineering Design and Manufacturing in India since last 50 years with offices and manufacturing plants across Western India. Elecmech Group is associated with projects for many of the Fortune 500 companies and is approved by leading Engineering Design Consultants of India and United States.

Electrical Power System

- Incoming Power Supply Tap off point
- Overall Power Distribution Redundancy
- Receiving Substation and Switchyard
- Traction Substation
3rd Rail Traction System. Over Head Electrical (OHE)
- Auxiliary Supply Design for Stations and Depots
- Electro Magnetic Interference (EMI) and Electro Magnetic Compatibility (EMI)
- Emergency /Standby Power

Signaling and Telecommunications (S&T)

- Optical Fiber Cable (OFC) with Gigabit Ethernet Switches, Radio Communication Network
- Local Area Network & Network Management System
- Public Address System & EPABX system (Digital)
- Closed Circuit Television System (CCTV) for Stations!
- Passenger Information Display System (PIDS)



Metro Stations & Depot

- Metro Station Electrification, HVAC, Fire Fighting, ELV, BMS and Controls
- Over ground and underground
- Station Integration Areas
- Depot and Workshops
- Diesel Generator for Back up of Power



Operation Control Center (OCC) & Depot Control Center (DCC)

- Large Video Screens with Control Desk
- Integration Strategy of various technologies in this Center
- Power, UPS and HVAC design of Data Center



Automation and Control Engineering

- Control System Architecture & Design (DCS / PLC / SCADA)
- Control Philosophy
- Graphical and Functional design of SCADA systems on all leading SCADA platforms.
- PLC Software Development: Logic/Ladder diagrams
- Input Output schedules, Instrument list, Instrument hookup & Installation drawings
- Hands on working knowledge on communication protocols and BUS architecture.
- Protocol Conversion Knowledge
- Alarm Management Software
- System Integration with Printer, Public Address system, Mobile phone, Pager and Text Messaging