

Overview

Country or Region: India

Industry: Power

Customer Profile

Mumbai International Airport Pvt. Ltd. (MIAL) is a joint venture between the GVK-SA consortium and Airports Authority of India. MIAL was awarded the mandate of modernizing and upgrading Chhatrapati Shivaji International Airport (CSIA) in April 2006. CSIA is India's busiest airport and will cater to 26 million passengers and 520,000 tonnes of cargo in 2007-08. MIAL's vision is to transform CSIA to one of the world's best airports that consistently delights customers and be the pride of Mumbai.

Power Management Solution helps MIAL make AIRPORT more energy efficient



As a crucial step forward in the modernization and expansion of Chhatrapati Shivaji International Airport (CSIA), Mumbai International Airport Pvt. Ltd (MIAL) awarded the EPC contract to India's leading technology, engineering and construction company Larsen & Toubro (L&T). The scope of works apart from civil and structural works in the passenger terminal building involves finishing works, electrical and mechanical installations, passenger boarding bridges, elevators, and escalators, IT systems, security systems, flight information display systems, baggage handling systems, building management systems, furniture and signage, etc

The Solution

C&A delivered and implemented- **iVision_{max} - PMS™**, to Control & Monitor various Electrical equipments like Incomers, Outgoing Feeders, Motor Feeders, Transformer Feeders and Bus Couplers for 12 substations. It also provides modules for Load

Shedding, Power Quality Monitoring, Trends and Reports.

iVision_{max} - PMS™ provides integration of

1. 12 Substations having voltage level 66 KV – 415V
2. 100 Numerical/Protection Relays (Feeder Protection relays) along with 3200 Energy Meters
3. 22 Data Concentrator Units (L&T -iDataMan)
4. Billing system interface

Additional functionality

- 1) Load shedding module is to ensure the availability of electrical power to all essential and most critical loads in the plant. This is achieved by switching off non-essential loads in case of shortage of power in the plant electrical network, or parts of the plant electrical network. With implementation of the Load Shedding Fast and automatic correction of power, exact

About Us

L&T Control & Automation (C&A) is a Strategic Business Unit of L&T Electrical & Automation. It is a part of Larsen & Toubro – the multi-billion India-based conglomerate. L&T's C&A business is market leader in delivering integrated electrical & automation solutions in India and overseas. With over three decades of experience in diverse industry segments, C&A delivers value through comprehensive solutions based on varied technology platforms and incorporates the benefits of its wide-ranging experience. L&T's state-of-the-art Automation Campus at Navi Mumbai in India has the latest testing and manufacturing equipment. It incorporates a modular manufacturing unit, an application software laboratory and a fully networked office for engineering and project management.

LARSEN & TOUBRO
Control & Automation
Automation Campus,
Shil Mahape Road,
Navi Mumbai
India.
Tel : 91-22-67226300

E-Mail:
CNA-marcomm@LnTEBG.com

Web Site:
www.LnTEBG.com

Our Integrated Electrical & Automation Solutions:

Cement

- Material Handling
- Cement Plant E&I
- Automation Solution for Steel Making

Energy Solutions

- LV/690/MV Drive Systems
- Solar PV Products and solutions
- Power Management System
- Availability Based Tariff System

Infrastructure

- Airport Baggage Handling Systems
- PMS for Airports & Metro
- ECS & TVM for Metro
- AFC for Metro

Oil & Gas

- Integrated Process Control System
- Pipeline SCADA
- Emergency Shut Down System and
- Fire and Gas
- Terminal Automation

Power

- Integrated Controls for Boilers and Turbines
- Station C&I for Power Plants
- E&I for main plant & BOP Systems

calculation of the load to be shed with security margin, Operator definable load priorities and load shedding groups.

- 2) UPS condition monitoring, Battery health and discharge time monitoring, Rectifier health monitoring, UPS temperature monitoring & alarm and UPS electrical parameters like loading, output voltages etc.
- 3) Provides demand control for plant, Minimize impact on production due to overloading and Maintains power balance in plant.
- 4) Manual load shedding, Scheduled load shedding, User configurable Load Shed Groups, User configurable Load Priority and Load Restoration.
- 5) Interfacing with airport BMS system.
- 6) Monitoring of Diesel Generators.

Benefits

- 1) Load shedding in emergency conditions to provide power continuity to the critical operations of airport.
- 2) Routine log report generation and energy reports for billing system.
- 3) Historical & Real time trends and Voltage, current ,pf, power, frequency, energy.
- 4) Detection & reporting of alarms.
- 5) Fast detection of breakers trip status.

