



ANJUMAN-I-ISLAM'S

KALSEKAR TECHNICAL CAMPUS, NEW PANVEL

Approved by : All India Council for Technical Education, Council of Architecture, Pharmacy Council of India New Delhi,
Recognised by : Directorate of Technical Education, Govt. of Maharashtra, Affiliated to : University of Mumbai.

DEPARTMENT OF ELECTRICAL ENGINEERING

☒ SCHOOL OF ENGINEERING & TECHNOLOGY

☐ SCHOOL OF PHARMACY

☐ SCHOOL OF ARCHITECTURE

Industrial Visit

School/Department: SoET Electrical Engineering Department

25 September 2025

Name of company:	Maharashtra State Load Dispatch center
Address:	Kalwa, Maharashtra
Contact Person Name	Mr. Mangesh Putane
Email-Id:	scada.sldc@mahasldc.in
Date of Visit:	22 September 2025
Year/ Sem:	Final Year - VII
Total Number of Students:	24
Accompanying Faculty (Name and Designation)	Prof. Akshata Tadkod, Prof. Pritika Patil Assistant Professor, ECE Department

DETAILS OF INDUSTRIAL VISIT:

As part of our academic curriculum and to gain practical insights into power system operations, we undertook an educational visit to the **State Load Dispatch Center (SLDC)** located in **Kalwa, Maharashtra** on **22nd September 2025**.

The primary objective of the visit was to understand the real-time monitoring, scheduling, and coordination of electrical power flow across the state's transmission network. The SLDC plays a central role in balancing electricity supply and demand, maintaining grid frequency, and ensuring the safe, reliable, and economic operation of the power system within the state.

The State Load Dispatch Center (SLDC) acts as the nerve center for managing Maharashtra's power grid. It is responsible for:

- Real-time supervision of the state's transmission system,
- Scheduling and dispatch of power from generating stations as per demand,
- Load forecasting and demand-side management,
- Maintaining grid frequency and voltage levels within permissible limits,
- Coordinating with Regional Load Dispatch Centers (RLDCs) and various generating and distribution entities,
- Monitoring renewable energy integration and issuing operational instructions to ensure system stability.

We were guided by **Mr. Chavhan** and **Mr. Chate**, both **Senior Engineers** at the SLDC. They conducted an in-depth and engaging session, providing detailed explanations of how the SLDC functions on a 24/7 basis to ensure uninterrupted power supply across Maharashtra.

Key topics covered during the session included:

- Grid management using SCADA (Supervisory Control and Data Acquisition) systems,
- Load forecasting and power scheduling methodology,
- Handling emergencies and contingencies in the grid,
- Real-time data visualization and automated alerts,

Innovative Teaching - Exuberant Learning

Vision : To be the most sought after academic, research and practice based department of Electrical Engineering that others would wish to emulate.



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• The role of SLDC in integrating renewable energy sources into the grid.
Through live demonstrations and interactive discussions, we observed how decisions are made in real-time to maintain grid stability and avoid outages. The visit was highly informative and bridged the gap between classroom theory and actual field operations.
The visit was highly informative and gave us a comprehensive understanding of how power is monitored, managed, and distributed in Maharashtra. It also emphasized the importance of coordination and technology in maintaining grid stability.

Outcome:

- Students gained a clear understanding of how electrical load is managed and distributed across the state of Maharashtra.
- Students learned about the functioning of the SLDC in maintaining grid frequency, stability, and real-time power balance.
- Students observed the practical application of technologies such as SCADA in power system monitoring and control.
- Students understood the coordination required between generating stations and load centres for efficient power supply.



CO- PO Mapping

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C01	3	3	3		3	3		3	3	3		3	3	3
C02	3	3	3		3	3		3	3	3		3	3	3
C03	3	3	3		3	3		3	3	3		3	3	3
C04	3	3	3		3	3		3	3	3		3	3	3
C05	3	3	3		3	3		3	3	3		3	3	3
C06	3	3	3		3	3		3	3	3		3	3	3

Dr. Afzal Shaikh
HOD, ECE

Dr. Rajendra B. Magar
Dean, AIKTC-SoET

Dr. Ramjan Khatik
Director, AIKTC

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