

Industrial Visit Report

Name of Industry: **Area Load Dispatch Centre Jambuva, Vadodra, Gujarat**

Date of Visit: **21.02.2018**

Faculties: **Dr. Vijay H. Makwana**

Prof. Rakesh M. Patel

Class: **Final Year B.E. Electrical**

Number of Students: **40 (Forty)**

Industry Guide: **Er. Pravin Gupta, Executive Engineer, ALDC, Jambuva.**



ALDC, Jambuva, Vadodara is one of the LDC in India which monitors the real time data of 53 Substation under the scope of DGVCL (Dakshin Gujarat Vij Company Ltd.) and MGVL (Madhya Gujarat Vij Company Ltd.). The Load Dispatch Centre is like of human body for the operation, planning, monitoring and control of the power system. There is always difference between Supply and Demand of Power. Thus, ALDC ensures Healthy and Economical Power System. **24 Hours are divided into slots of 15 Minutes for the scheduling and forecasting of load.**

Load Dispatch Center contains the Supervisory Control and Data Acquisition System (SCADA) to Supervise and Control the Power System. It uses RTUs (Remote Transmission Unit) at Sub-stations to receive data at fixed interval of 5-6 Seconds. Quantities like Voltage, Current, Frequency, Active power, Reactive power are monitored in this manner.

Major Functions of ALDC:

1. Data processing and system studies.
2. Load forecasting
3. Station wise outage position
4. Co-ordination with neighbor grids.
5. Maintainance of grid discipline.
6. To Maintain system security, SCADA management and communication.
7. Monitoring of Station wise generation