

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM-590 018**



**A Project Report
on**

“LOAD MANAGEMENT – A SCADA APPROACH”

Work carried at:

**DON BOSCO INSTITUTE OF TECHNOLOGY
BENGALURU - 560074**

**Submitted in fulfillment of curriculum in VIII semester,
BACHELOR OF ENGINEERING**

in

ELECTRICAL AND ELECTRONICS ENGINEERING

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ABSTRACT:

In this project, the temperature, load current and input voltage related to the distribution transformer is monitored. For measuring various parameters transducers are used and the outputs of these transducers are converted in digital form and controlled using a programmable logic controller (PLC).

The output of the PLC is used to drive the digital display, so that the type of fault occurred can be displayed. In addition to the digital display PLC outputs are also used to drive relays independently. These relays energize and de-energize automatically according to the condition of the parameter.

The various faults detected are:

- Over voltage fault
- Under voltage fault
- Over current fault

The faulty parameters can be transferred and stored in the computer for further references. The current flowing through the primary, due to transformer action, is rectified with the help of a diode and then filtered by a filter capacitor. This DC voltage is variable voltage, which varies according to the load current. The variable voltage from the CT secondary is fed to the PLC for taking the necessary action.