

## ***ABSTRACT***

Voltage change in the generator in the mini plant of Microhydro Power Plant is caused by load change. It is need a Voltage control system in order to generator voltage is stable. For the Implementation of Voltage Control System is made a control system with used Programmable Logic Controller ( PLC ). Control system is a simple Voltage Control System.

In the final project will be explain how to make a Voltage Control System. The control system used PLC omron type CP1HXA40DRA as a Controller. Parameter value is voltage from output voltage of sensor.

Identification and controlling the plant (generator) is done by CX Program. CX Program is a Ladder Program of PLC. Hardware of the system are Voltage Sensor, DC motor Driver, Programmable Logic Controller, and DC motor.

Keywords : Mini plant of Microhydro Power Plant, Generator, Ladder Program, PLC