



RESEARCH ARTICLE

Prototype Implementation of Power Saver Street Lighting and Automatic Traffic Management System

Dr. D. Asha Devi^{*}, L. Prasad Naik^{}**

^{*} Professor, Dept. of ECE, MITS, Madanapalle

^{**} P.G. Scholar, Dept. of ECE, MITS, Madanapalle

Abstract- In India most of the power generation takes place from hydraulic power stations. In the present decade, cost of the power generation is very much expensive and we have very less water resources for hydraulic power generation i.e., 33 percent. Day by day cost per unit rises and it is unbearable for a common man and hence it is always better to depend on renewable sources. Therefore the use of with embedded system technology, the goal of the present study is to save energy in Street lighting and traffic system.

In the existing system, power consumption takes place due to continuous lighting throughout the night by street lights. Hence an idea is implemented in such a way that the lights will be switching ON only in the presence of traffic on the roads at night times. Therefore, maximum power will be saved and the saved power can be used for some other useful purposes like agriculture, industries and domestic purposes.

In present days, we are facing the traffic problem in the rural as well as urban areas. It is essential to control the traffic density in an efficient manner in such a way that it can control according to the priority of the more traffic density present in the street by using sensor network. The proposed idea was implemented by FPGA and sensor network on VHDL platform.

Keywords- field Programmable gate array (FPGA); Infrared Sensor (IRS); Very High Speed Integrated Circuit Hardware Description language (VHDL); Light Dependent Resistors (LDR)