

## **ABSTRACT**

*Micro hydro systems is a shortcut to obtain electrical energy that increasing, stability of frequency is needed so processing to keep frequency keep stable. One of methode is do controlling on turbin in generator, especially in PLMh (micro hydro power plant). The frequency of the generator must be maintained so that the output power stability in the generator running well. Frequency fluctuation is one of the obstacles the delivery of electrical power to the load, it is also time that did not immediately return to normal conditions would cause damage to the system such as disorders of the electricity network, so it is necessary to control the load on the micro-hydro system. So we need an electronic device for load control, namely Electronic Load controler. The controller is used to maintain the change in frequency is fuzzy control, to regulate the load that consumers use to be transferred to the ballast load to the system switch using triac which works to regulate the supply of the load to the consumer or the ballast load so that the frequency generator remains stable at the set point value of 50 Hz.*

**Keywords :** *Microhydro system, Electronic Load Control, Ballast Load, Triac.*