ABSTRACT

Electrical energy is the energy that is needed. Almost all of the necessities of life require electrical energy. At this time a general way that is widely used for plants using fossil fuels such as coal. However, most of the power plants are less efficient, environmentally unfriendly, and the cost is relatively expensive pembuatannyapun. For example, coal-fired power plants that are currently used to produce 60% of world electricity. Carbon emissions from power plants could lead to acid rain and air pollution. Currently the resulting pollution has been linked to global warming due to the chemical composition of coal.

In this thesis designed a power-efficient and environmentally friendly power generation system is to harness the river water. The plant produces a maximum voltage can adjust the wheel position because of river water ups and downs. Windmill generator drive the DC motor to be used as a voltage parameters and determine the height position waterwheel.

In this thesis successfully designed power plants that utilize aliaran river. This power plant can work if there is a stream and has no effect by tidal waters because this tool is able to search for the maximum voltage automatically. It is expected that in the making of this thesis can be created by a power source that is effective and does not require dams to create hydroelectric power plants.

Key Word : *Generator DC*