

ABSTRACT

FEASIBILITY STUDY OF MICRO HYDRO POWER PLANT (MHP) ON ARTER RIVER AT HURUN VILLAGE PADANG CERMIN DISTRICT PESAWARAN REGION LAMPUNG

BY

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Electricity is very important in human life. In Indonesia, electricity is a basic necessity for society and industry. Electrical energy supply in Indonesia is targeted to use the 5% comes from renewable energy, it has been included in the government regulation No. 3 of 2005. One of the power plants that are potentially is Micro Hydro Power (MHP), which is an implementation of the green energy initiative to encourage renewable energy step. If the MHP potential can be developed, then at least 12,000 MWh or 14% of Indonesia's total energy needs in 2005 are contributed by the MHP.

The purpose of this final project: " Feasibility Study of micro hydro power plant (MHP) on arter river at hurun village Padang Cermin district Pesawaran region lampung " is to plan a hydroelectric small scale power plant that can be used and applied as a fulfillment of electrical energy in Indonesia, especially for people who can not enjoy electricity.

The Procedures to obtaining data for Head cleaner using a plastic hose method and calculation method, so the net head of 11.15 m obtained. To determine the amount of water flow, the method used is the method of floating objects, as well as doing some calculations and obtained intake capacity of 66.7 l / s. And the resulting power of 5.10 Kw. The data result from the third turbine is suitable types of cross flow turbine.

Keywords: micro hydro power plant, water discharge, crossflow turbine.