

ANALYSIS OF HYDROLOGY RIVER TILD WITH NAKAYASU AND FJ.MOCK METHOD FOR MINI HIDRO POWER PLANT (PLTM)

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ABSTRACT

The abundance of hydro power potency in Indonesia to be used as power plants can help meet the electrical energy needs of a growing, particularly in remote and isolated areas. Mini Hydro Power Plant (PLTM) is one of the power plants that utilize water to generate electrical energy. The appropriate plant planning sustain the plant's operation optimally. In order to know the river discharge planning dependable discharge in determining the capacity of a power plant and design flood discharge required precise hydrological analysis and direct survey at the area as well as comparative data to know the actual conditions. This thing becomes very important as a study of the potency of the Mini Hydro Power Plant (PLTM). The data of Rainfall, climatology, topographical map, forestry map, geological map, soil and river characteristic become important sources for plant planning. Where that will obtain design flood discharge and dependable discharge to design a weir, locate the power house and determine the capacity of the power plant with other supporting data such as height of fall, whole instrument's efficiency, the force of gravity and the density of water.

Keywords : *Mini Hidro Power Plant (PLTM), river discharge, design flood discharge, capacity of power plant.*