ABSTRACT

On the wane availability of fossil energy resource which till now still represent especial component and backbone of electrics energy producer in Indonesia, and also the increasing of society awareness to preserve environment cause we have to think to look for alternative electrics energy that able to lessen depended to usage fossil energy, can provide electrics energy in local scale, can use local energy resource potency, and also environmental friendliness.

Supporting the mentioned, hence the activity of development and research Microhydro Power Plant can be used as one of the national requirement in energy area, where in Indonesia society, there is still not yet earned to enjoy electrics that is in purilieus, precisely in Countryside Karangsewu, District of Cisewu, Sub-Provience Garut, West Java. Potency of water debit measured in River Ciawi river is 150 litres / second and head measured is 14 metres. While electricity potency able to be awakened by Karangsewu Mycrohidro Power Plant is 12 kW. Karangsewu Mycrohidro Power Plant will use penstock as long as 140 metres. Electrics installation majored at countryside center and reach ± 45 family head, which divided in citizen houses electrics installation, public facilities, and social facilities.

Keywords: Microhidro Power Plant, Garut-West Java, “Desa Mandiri Energi”. 