ABSTRACT

The inverter in charge of converting DC current to AC current generated by solar panels has an important role. Where it takes an inverter that has Current Sharing a good. Then a system was built to analyze the inverter current output with a PLTS system on grid without a battery. In this study the Micro Inverter type inverter is used, where this type of inverter has a low current output. Its application is easy and safe, making the inverter can be placed under the solar panel. Then the output current will be measured by sensors and standardized measuring instruments.

The measurement data will later be studied and analyzed related to environmental influences and changes in load. Where you will see the Current Sharing that occurs on the Micro Inverter. This experiment covers things that affect the work of this system. The results of this experiment will later become a reference for the community so that they can implement this type of PV mini-grid system and find out the effectiveness of the Micro Inverter itself.

In this final project, several schemes have been tested, where it can be concluded that no current sharing is found in this system because the test results do not show an even distribution of current. The inverter output current is the maximum output of the solar panel

Keywords: *Micro Inverter, Solar Panel (PV), Current Sharing, AC, DC, Current, Voltage, Power*