

MCU-BASED CURRENT SWITCHING FLOW CONTROL AND POWER STORAGE IN THE GRID TIED PHOTOVOLTAIC POWER SYSTEM THRU CURRENT SENSORS



Kierven R. de Mesa

Abstract

Nowadays generating electricity by using solar power systems is becoming more and more popular that is why grid-tied photovoltaic power system is now also beginning to trend. But the problem with the grid-tied photovoltaic power system is that the excess power generated by the solar panels gets back into the utility power generated came about into the researchers. Now in creating the system, it needed a grid and adds up to the user's power consumption. Although net metering was the supposed answer by the utility it is still financially unfair. And that is why solutions that can control the current flow and store the power generated by the solar panel and choose whether to get power from the utility (Meralco) or from the microcontroller that can withstand the amount of current normally needed by the user to allow the control of current. The system also uses a current sensor for monitoring the current and a lead-acid battery for power storage. The project aimed at developing the current grid-tied photovoltaic power system and advertising this for this can be the future of power consumption.

Keywords:

Grid-tied, Power Consumption, Photovoltaic Power System, Power storage

