

## **ABSTRACT**

*In an age of this modern era humans are so depend on electrical energy. so the need for electrical energy is very high. Then it appeared an alternative energy that can be used to cover the needs for electrical energy. One of the alternative energy is solar power which sourced from sunlight that pretty much used in this days.*

*But because solar energy is very dependent from the sunlight, so power that will produce from solar energy are not constant, so demand side energy management consept are used to save the use of electrical energy by manage the electrical equipment by priority or not.*

*In this final project conducted demand side energy management on solar home system testing by calculating the value of energy not supplied each priority for one week. Results from the test obtained an average value for priority 1 of 1,28%, for priority 2 of 14,54%, and for priority 3 of 21,82% and sensor accuracy of 97,90 for voltage sensor and 95,45 for current sensor.*

***Keyword : Demand side energy management,Energy not supplied,Voltage***