



**A PROJECT PROPOSAL ON
THE ASSEMBLING AND INSTALLATION OF A SOLAR KITS
BY**

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• INTRODUCTION

BACKGROUND OF THE STUDY

The general objective of the system is to provide efficiency, steadiness in the use of power appliances, by ensuring continuous availability of power supply even in the absence of mains. Uninterruptable of the system made it possible to eliminate all suspense from mains outage during the execution of an important and urgent assignment as may be required.

For better production of the system, the system was operated at a fully charged condition of the battery.

The project was rated 200W of 220V and 50Hz. It was expected that at this condition, it was favorable to carry load of the stipulated power. Loads of low power factors are not helpful since they produce spikes. Overloading is not potent to provide zero change over time and the inverter had LEDs which indicates mains failure and battery discharge and system fault.

2.0 AIMS AND OBJECTIVES OF THE STUDY

the aims of the project is the assembling and installation of the solar kits.

3.0 SCOPE OF STUDY

This solar power source makes it possible to provide a clean reliable supply of alternative electricity free of sags or surges which could be found in the voltage frequency.

The solar power system (SPS) system achieved this by direct current from solar panel and by rectifying the standard main supply, using the direct current to charge the batteries and to provide clean alternative power by passing the energy a filter system.

• 4.0 DEFINITION OF TERMS

1. Inverter unit: This unit converts a DC voltage into AC voltage with the help of the inverter unit.
2. Automatic Control Unit: This provides all the required control needed to meet up the objective of the whole system
3. Battery Unit: This is a secondary cell unit, capable of storing enough DC voltage from either sun or AC main, of which is later converted to AC voltage.

5.0 METHODOLOGY

Step Solar Panel Installation Process

- Set Up the Scaffolding. Scaffolding needs to be set up before installing the solar system.
- Install the Solar Panel Mounts.
- Mount the Solar Panels.
- Secure the Electrical Wiring.
- Connect the Solar Inverter.
- Bond the Inverter to the Solar Battery.
- Test the Newly Installed Solar Panels.

The primary component of the Solar system is the Sun. The other components include the planets, moons, asteroids and comets. Most of the objects in the solar system orbit around the sun in the same direction in which the sun rotates, Halley's Comet being an exception

A solar system is a group of planets and other bodies that revolve around a star. The Earth is in a solar system with seven other planets and some other orbiting objects including Pluto (who was kicked out of the planet club in 2006).

Components of Solar System

The components of the Solar system are:

Sun:

- Sun is the biggest star in the solar system and consists of 99.86% of all the mass of the solar system. It is located in the centre and is a sphere of hot plasma. Continuous nuclear reactions take place in its core which radiates energy in the form of light and infrared radiation. Sun is the most significant and primary source of energy for life on Earth. Its mass comprises approximately 73% of hydrogen, approximately 25% of helium and remaining of oxygen, carbon, neon and iron.