ABSTRACT

Power is one of all parameters that being prioritize on electronic technology. Every electronic things as advanced require electrical energy as the main power for doing their functions as a tool. Electrical energy intake can be represented by a device that store electrical energy that can be a battery. In a BTS there is a processing power device, such as: rectifiers, generators, battery, adapter, UPS, inverter power supply, etc. As usually, a BTS is equipped with some batteries as secondary power supply.

In this final project will be designed a tool that able to monitor the state of the battery in the transmission system (BTS). This system can signify 4 parameters of the battery, first if the battery source goes out (battery unused / the state: discharging), second when the electricity turned on but the battery source is increasing (the state of the battery is charging), the third when the source of the electricity is turned on but the battery is fully charged (the state is idle) and the last if the source of the battery is runs out. All these conditions will be delivered to a database from the tools trough the GPRS connection. System that designed is similar to a circuit that can measuring a voltage based on microcontroller that combined with GSM (the tools looks like a wireless voltmeter) as a measuring parameters that will be the input of the variables battery state for inputting *database*.

With this final project had been created an android application that integrated with a system of a tool that can giving access information to user. The information contain an information of a BTS's battery. The user can accessed on an android application by asking the data on a database server that filled with the data from the tool.

Key Words: **BMU,** *Battery Monitoring Unit***, Secondary Power Supply, Android, GPRS.**