ABSTRACT

Development and technological advances so rapidly, along with the progress of science at this time makes technology is no stranger for people. Technology has an important role to assist and facilitate the process of people's lives, especially in the modern era there are many developing testing system of wet battery. This final project created a prototype as an alternative to maintenance officer of wet batteries BTS to check the condition of voltage and leveling the liquid of wet battery BTS from a long distance. The system of SMS facilitate officers to check the condition of the wet battery in BTS which has a distance up to tens of kilometers from the office. To measure the voltage value of wet battery needs to use a sensor that can read the voltage is a voltage sensor. To measure the leveling of liquid of wet battery needs to use a heavy sensor. Furthermore, the notification SMS will be sent via system of SMS. In this final project using sim800l GSM module which has been connected with the Arduino Uno. Arduino Uno will process the command and send SMS data of checking from sensor and there is also notification of batteries that needs to maintenance when the voltage and the weight of battery is under the minimum condition. In addition, there is LCD that can be used for officers when the officers are already in the location. A prototype implementation checks the wet battery conditions in BTS is successfully created with the value of average error of the 0.011% voltage sensor and 0.06% heavy sensor.

keywords: wet battery, wet battery maintenance, voltage sensor, heavy sensor, arduino uno, sim800l, LCD.