ABSTRACT

In the age of technological development era 4.0 not a few industrial companies use a power supply that must operate for 24 hours non-stop. The operating power supply should also not be in a state of less or more than the nominal value limit of +/- 10% of the voltage of 220v AC. Although the power supply has a back up system still has technical constraints so it cannot guarantee the system can operate properly. Problem constraints in the power supply back up system due to a lack of human resources that handle the field of electrical mechanics and some components such as batteries should be replaced are still forced to operate. So the onse of disconnected relationships is inevitable and can be detrimental to the company. Therefore, despite having a back up system, the power supply must still be monitored in order to maintain the system in operation so as not to harm the company in terms of cost.

In this study, an internet-based power supply monitoring system (IOT) will be created with back-up SMS gateway. The system consists of the ZMPT101b voltage sensor, the SCT013 current sensor and the DHT22 temperature sensor and the data will then be stored in the microcontroller (Arduino uno) in real time using logger data. then data stored on the microcontroller using logger data will be sent to the Thingspeak platform with an ethernet module connector. After that the data sent to the platform can be accessed in The Internet.

It is expected that with this system, the Technician power supply employees in the event of interference or under voltage in PLN and can prevent things that result in losses on the power supply system because employees receive alarm notifications in the form of sms from the monitoring system.

Keywords : Power Supply, SMS Gateway, Internet, Sensor, Monitor.