## **ABSTRACT**

Electrical energy is an energy that cannot be separated from human daily needs. In its use, there are still few people who pay attention to the use of electrical energy consumed by the loads, due to lack of energy and costs monitoring used by electronic devices, and costs to be paid. Besides, the use of electrical energy will wasteful when the use of electronic devices is not monitored and controlled. For this reason, a tool for monitoring and controlling energy usage and electricity costs has been developed through LCD and smartphone. Several data were obtained from the results of the research process. Including % error data, 2.6% current, 2.36% power, 0.3% energy, and 0.3% costs.

Keyword: power, energy, cost, electrical, monitoring, smartphone, LCD