

**DESIGN SYSTEM OF ELECTRICAL POWER SYSTEM IN KWH METER  
PRABAYAR BASED SMS USING ARDUINO UNO  
AND GSM MODEM SIM 900A**

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**ABSTRACT**

Electric theft is increasingly prevalent among PLN customers, various ways have been done for handling and prevention. One of the handling in the case of electricity theft is PLN formed a controlling operation of electricity consumption or often abbreviated P2TL. But this is still not effective because PLN is still difficult in terms of detection and accurate targeting of violation operations. This prompted me to help and facilitate the detection and targeting of operations for PLN customers who infringe on electricity. The problem of PLN which is my priority in helping and preventing the occurrence of electricity violation is when the theft of electricity is done and the duration of electricity theft has been done. Tools that I will make this can help in the technical side of the indication of the occurrence of infringement or theft of electricity is an integrated security system android applications on kwh meter prepaid. Where this tool's actual function is as an electronic seal that is designed in such a way with motion sensors that connect to the gsm module to facilitate the notification process on android applications. The working principle of this tool is that if PLN customers deliberately open the seal then the sensor will be active and send notification via gsm module and will be accepted by PLN officers. Where the contents of the notification are the timing of the seal opening, the customer ID number, on behalf of the customer and the customer's address which is further followed up by the PLN officer or P2TL team as the target of the operation and drove to the customer's location or home to ascertain whether or not there has been a violation.

Keywords: Electric Theft, P2TL, PLN Customers, Electronic Seals.