ABSTRAK

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Judul : Analisa Perbandingan Kinerja Kwh Meter Prabayar Dan Pascabayar Satu Fasa Di PT.PLN (Persero).

KWh Meter adalah alat yang digunakan untuk menghitung dan mengukur seberapa besar konsumsi listrik. Terdapat dua jenis *kilowatthour* meter atau kWh meter yang di gunakan yaitu kWh meter analog dan kWh meter digital. Daya yang di gunakan konsumen di hitung oleh kWh meter per satuan jam dan akan dicatat otomatis oleh pihak PT.PLN menggunakan kWh meter. Tujuan dari penelitian ini untuk mengetahui kinerja dan berapa tingkat ketelitian kWh meter analog maupun digital dengan cara dibebani menggunakan beban lampu pijar 240 Watt, Komputer 300 Watt, Dispenser 350 Watt , Setrika 350 Watt , Motor induksi 100 Watt sebagai beban induktif faktor daya < 1 antara 0,8-0,1 nilai positif. KWh meter digital dan kWh meter analog ini memiliki ketelitian yang berbeda. Untuk mengetahui perbedaan ketelitan dilakukan sebuah pengujian untuk membuktikan perbedaan ketelitian dan diperoleh hasil 3 kWh meter analog dan 3 kWh Meter Digital. Dari tabel kesalahan didapati hasil prosentase Didapati kesalahan pembacaan pada kWh meter digital 1 2,6% analog 1 4,4% digital 2 1,6 % analog 2 2,9 % digital 3 1,1 % analog 3 2,5 %.12,9. dapat di simpulkan bahwa kWh meter analog paling besar rata-rata kesalahan bacanya dibanding dengan kWh Meter Digital.

Kata Kunci :ketelitian, kWh meter prabayar, kWh meter pascabayar

ABSTRACT

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Judul : *Analysis of the Comparison of the Performance of Prepaid Kwh Meters and One-Phase Postpaid in Pt Pln (Persero).*

KWh Meter is a tool used to calculate and measure how much electricity is consumed. There are two types of kilowatthour meters or kWh meters that are used namely analog kWh meters and digital kWh meters. The power used by consumers is calculated by kWh meters per hour and will be recorded automatically by PT. PLN using kWh meters.The purpose of this study is to determine the performance and level of accuracy of 3 analog and 3 digital kWh meters by being burdened using 240 Watt incandescent lamp load, 100 Watt Computer, 350 Watt Dispenser, 240 Watt Iron, 100 Watt induction motor as power factor <1 between inductive loads 0.8-0.1 positive value. This digital KWh meter and analog kWh meter have different accuracy. To find out the difference in research, a test was conducted to prove the difference in accuracy and the results of analog kWh meters were obtained.From the error table found the percentage of error readings in 20 trials at 2 different trial locations. Reading errors found on a digital kWh meter with a 240 Watt incandescent lamp load with an error reading a Digital kWh meter found 1.3% results while the Analog kWh meter 2.8% while the load using a computer 300 Watt digital kWh meter 2.0% and analog kWh 3.2%, while using a 350 Watt digital kWh Dispenser load found 1.2% and Analog kWh 3.0%, while using a digital Kwh meter Iron load found a 6.0% result and an Analog kwh 6.1% and using a 100 Watt induction motor load with a 4.5% error reading while analogue 7.2%.

Keywords : accuracy, prepaid kWh meters, postpaid kWh meters