## ABSTRACT

## PERFORMANCE ANALYSIS OF THE ELECTRICAL ENERGI USING IN SECTOR OF ELECTRIC MOTOR LOAD (CASE STUDY IN PT. INDONESIA POWER UBP PERAK & GRATI SUB UNTI PLTU PERAK - UNIT 3 & 4)

Addressing the issue of scarcity of electricity in Indonesia enegi, Director of PT. Indonesia Power echoing energy saving policies self-start (the Company). Technically, this policy of using internal electrical energy more efficiently. In an effort to implement this policy, the company needs to ascertain and map the needs of internal consumption of electric energy in every sector of the load. Thus, the Management Company has an objective basis for improving the efficiency of internal use. Objects taken from OJT for Field Project (FP) This is a sector of the burden of electric motors. The topics raised in this FP is the implementation of Energy Management at the plant Perak Surabaya, while the focus being put forward is the performance of electrical energy usage in the sector load electric motors. FP is applying the concept of energy audits to develop a picture based on the needs of electric power installed load (specific to the sector load electric motors) and electric energy consumption in accordance with penggopersiannya period. Audit results are measurable on-Demand Supply parameters indicate that the demand (load power installed) in the sector load motors are the most common place of waste, namely Demand has exceeded supply (power is available) 20% of supply, as well as the parameters of Load factor (load factor) showed 6% assuming the continuous state. Meanwhile, the sector load motors 380V units 3 and 4 conditions are still under the Supply Demand but the figure is only 6% Load Factor. The second parameter of the three sectors is definitely needed to do energy conservation or savings scenario.