

ABSTRACT

At this time population growth and the development of increasingly advanced technology causes most needs of power resources to support a better life. The increase of electrical energy consumption shows the quality standards of Human Resources (HR) be better. Therefore it's needed the reliable quality system of distribution network. Power distribution system that existed was divided on the basis of distributed transmission that including High Voltage Air Transmission (HVAT). The results showed that HVAT gived negative impact such as lower fertility for crops and weaken the level of health for the population. For that there are many efforts to explore the positive side of the existence of a magnetic field around HVAT by utilizing electromagnetic radiation around the tower and the span wire of HVAT. Radiation is used to generate electrical energy. And the energy is obtained from the voltage supplied and loaded to device.

Voltage that is proportional with flux magnetic field around HVAT is obtained with the coil. The coil windings are made with elongated conductor (solenoid) that is inserted with core iron and also ferrite with calculations and measurements of inductance values before

Voltage level that's obtained was still small . By using ferrite the voltage level becomes larger due to the influence of permeability of the ferrite is larger than the iron. The voltage is expected to be increased become 5-12 volts with a voltage multiplier or sensitive ferrite transformer

Key word: HVAT,Magnetic Field,Electromagnetic radiation