ABSTRACT

Solar heat in Indonesia is currently influencing the development of renewable energy sources, one of which is solar power plants, so as not to always depend on fossil energy energy. If the placement of the solar panel is wrong, it will get less power, because photovoltaic is affected by the intensity of the light obtained. To solve this problem, a controller is needed that can move solar panels to get maximum light intensity. For the drive using a linier motor. The drive system uses dual axis. In this study, it is expected that solar panels can follow the intensity of light to get maximum energy.

From the results of tests that have been carried out, it can be concluded that the sensor value has an accuracy rate at a pitch angle of 97% and an accuracy value at a roll angle of 98%. When the addition of the Fuzzy controller system response when reaching the setpoint becomes faster, the time needed to reach a stable state is also faster, and can reduce oscillation in the system response.

Keywords: *dual axis, photovoltaic, linier, Fuzzy*