

FNN BASED INVERTER CONTROLLER FOR SOLAR WIND HYBRID RENEWABLE POWER SYSTEM

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ABSTRACT

Use of Renewable energy sources for power production is increasing day by day. In this paper Fuzzy Neural Network is proposed to get regulated power from the renewable energy sources. A stand-alone hybrid power generation system consisting of solar and PMSG with AC load is designed in this paper. Additionally P & O algorithm for Solar and Hill climbing search algorithm for Wind are used as the control logic for the Maximum Power Point Tracking (MPPT). The proposed controller for inverter is intended to keep the load voltage and frequency as constant regardless of the renewable power generation. Comparative Simulation results with Fuzzy logic controller for inverter show the effectiveness of the proposed controller.

KEYWORDS: *Renewable Hybrid System, Fuzzy Logic, FNN, Inverter Control*

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