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Novel Hybrid MPPT Technique for Partially Shaded Photovoltaic Arrays-A review

Sumit Gavhale¹ and Vaishali Malekar² Students, Department of Electrical Engineering¹ Assistant Professor Department of Electrical Engineering² Abha Gaikwad college of Engineering And Technology, Nagpur, India

Abstract: This paper introduces a Review on hybrid MPPT control for photovoltaic (PV) arrays working under partial shading conditions. In This new algorithm will combine a traditional MPPT algorithm, such as perturb and observe, with the artificial neural network (ANN) technique. The proposed hybrid MPPT algorithm is based on the ANN and used to predict the global MPP region by estimating its voltage boundaries. Consequently, the conventional MPPT algorithm searches for the MPP in the predicted region. This technique increases the output power level of the PV array under various shading patterns. The proposed technique is modelled and simulated using MATLAB/Simulink.

Keywords: Hybrid MPPT, ANN, P&O

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