

EFFICIENCY OF PERTURB AND OBSERVE MPPT FOR PV SYSTEM WITH BOOST CONVERTER

MERABET LEILA, OURICI AMEL & TOURAB Wafa

Department of Electrotechnical Engineering, BadjiMokhtar University, Annaba, Algeria

ABSTRACT

In this work, simulation is conducted with Matlab /Simulink to validate the Perturb and Observe technic for tracking the MPP from Photovoltaic system. The MPP change with irradiation and variations in temperature. For this reason, a boost converter is employed to validate the P&O MPPT. The output power of PVpanelis simulated at various atmospheric conditions. Simulation results demonstrated the efficiency of the MPPT method.

KEYWORDS: Photovoltaic System, MPPT, Boost Converter, P&O & Efficiency