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A Multilevel Inverter Based on SVPWM Technique using Photovoltaic System for Reduction of Harmonics

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Abstract: *Multilevel inverters can reach the increasing demand for power quality and power ratings along with lower harmonic distortion and lesser electromagnetic interference (EMI). Inverters are power electronics devices which converter DC power to AC power. When load has high impedance against to harmonic current, VSI must be used there, while the load with small impedances against to harmonic current requires CSIs to be used in recent years, various pulse width modulation (PWM) techniques have been developed beside inverters. The two and three level inverter is simulated using MATLAB/Simulink and also the experimental results are presented for verifying the effectiveness of the system. The use of Photovoltaic Cell as source for the NPC Inverter is proposed here in this paper.*

Keywords: PV cell SVPWM Two-level three phase inverter

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