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Investigation of Dual Bridge Multilevel DC Link Inverter for PV Application

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Abstract : The main objective of the proposed topology is to synthesize a high quality sinusoidal output voltage with considerably reduced switch count than the conventional MLI. The proposed topology consist of series connected H-bridge and diodes. The number of levels dependson dc source arrangement. Heredc sources can be replaced by PV. The proposed PV based dual bridge MLDCLI (DBMLDCLI) is evaluated using phase disposition (PD) multi-carrier pulse width modulation (MC-PWM) strategy. The performance of a dual bridge dc-link inverter topology is simulated through MATLAB/SIMULINK and the THD of the output voltage is analyzed. The results are validated.

Keywords : Dual Bridge Multilevel Dc Link Inverter (DBMLDCLI), Phase Disposition (PD), THD

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