CONCLUSION

In this project, a new topology of cascaded switched diode multilevel inverter is designed for renewable energy integration. The topologies of cascaded H-Bridge and cascaded switched diode multilevel inverters have been analyzed for both 5 and 9 levels, sinusoidal pulse width modulation technique is used to generate gating pulses. To reduce the THD of the developed topology multicarrier in phase disposition SPWM technique and LC filter is used. 5 and 9 Level output is observed in respective topology. The number of switches used in the topology is less which in turn reduced the corresponding gate driving circuitry and made the circuit compact size. The circuit of developed multilevel inverter is simulated in MATLAB/SIMULINK and the total harmonic distortions for CHB and CSD are obtained by using FFT analysis window. The lowest THD observed with LC filter is 0.95%. In phase level shifting SPWM is used for pulse generation