Abstract

Yasser Gaber A. Dessouky

Review of DC Offset Compensation Techniques for Grid Connected Inverters

Limitations of DC injection into the AC network is an important operational requirement for grid connected photovoltaic systems. There is one way to ensure that this issue needs a power transformer as a connection to the AC network. However, this solution adds cost, volume, mass, and power losses. Ideally there shouldn't be any DC at the output of the inverter, but practically, a small amount of DC current is present. Therefore, in this paper there are techniques for the DC offset elimination are proposed. Some have drawbacks which was treated by another technique. Also there are best solutions for eliminating DC offset as in section 17, and 18 as it explains how to reduce the DC offset in a transformerless operation with reducing the power losses, mass and the cost effect.