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A REVIEW ON HARMONIC REDUCTION TECHNIQUES IN THREE-PHASE POWER GENERATION IN PV SOLAR PLANTS

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ABSTRACT

There are a variety of techniques available for harmonic removal techniques. The methods have their own performance with respect to application. Also, cost of implementation of particular harmonic removal technique depends on the discrete and semiconductor components used while developing filters. Due to higher demands of electricity, power generations with low cost are most essential needs of the world. Photovoltaic-based power plant implementations are cost effective for long-term power generations due to technological advancements. While generating power from PV solar cells due to variations in the solar radiations, harmonic effect is seen. The harmonic reduction is the most important need while establishing grid-connected PV solar power plants. This paper introduces the review of various techniques for removing harmonics in PV solar power plant developed by various researchers. The addressed techniques are studied based on their robustness, implementation complexities and performance characteristics.

KEYWORDS: Photovoltaic Solar Power Plant, Harmonic Reduction, Harmonic Filters

Article History

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