

## Effect of MPPT and THD in Grid-Connected Photovoltaic System

**Authors :** Sajjad Yahaghifar

**Abstract :** From the end of the last century, the importance and use of renewable energy sources have gained prominence, due not only by the fossil fuels dependence reduction, but mainly by environmental reasons related to climate change and the effects to the humanity. Consequently, solar energy has been arousing interest in several countries for being a technology considered clean, with reduced environmental impact. The output power of photo voltaic (PV) arrays is always changing with weather conditions, i.e., solar irradiation and atmospheric temperature. Therefore, maximum power point tracking (MPPT) control to extract maximum power from the PV arrays at real time becomes indispensable in PV generation system. This paper Study MPPT and total harmonic distortion (THD) in the city of Tabriz, Iran with the grid-connected PV system as distributed generation.

**Keywords :** MPPT, THD, grid-connected, PV system

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