

Title:	Simulating Solar and Wind Based Hybrid Systems Synchronized and Segmented for Grid Connectivity
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Abstract:

This paper introduces the performance of hybrid power system which has a combination of solar power and wind power. PV array is extracting maximum energy from sunlight irradiation by using Maximum Power Point Tracker; it collects the power from the system and sends power to the dummy utility grid. On the other hand, depending on the velocity of the wind available, wind turbine rotates and energizes an asynchronous generator for power supply to the grid. These two separate sources are connected together for hybrid operation and synchronized appropriately for segmented power supply to the grid. For visual retrieve 'SimPowerSystem' tool of MATLAB has been used for simulating the same.

Keywords: Solar Energy, Wind Energy, Hybrid Power System and Matlab/Simpowersystem.

