

**Title of Article :** Wind Energy Potential in Nigeria

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**Abstract :** Wind energy is one of the fastest growing technologies in energy generation industry nowadays. The erratic and epileptic state of power in this country and the concern about global warming should be a great concern for all and should drive us into strong demand for wind generation. The main advantages of electricity generation from wind are the absence of harmful emissions, very clean and the almost infinite availability of the wind that is converted into electricity. In Nigeria, where the wind power prospect is estimated to be high or moderate has not connected this renewable resources to the grid. It is not just enough to say that the wind turbines should be connected to the grid because there are sufficient wind speeds to drive the wind turbine. Mostly, the stability and reliability studies must be carried out whenever wind power is to be connected to power system to predict severe consequences on the power system to which the wind generators will be connected. This paper therefore describes the wind energy potential in Nigeria and specifies the conditions to be met before the wind generator can be connected to the existing grid and how it can be connected. The paper also shows that short-circuit power at Point of Common Coupling (PCC) is the crucial value for the permissible installed power ratings of the turbine.