

# عنوان مقاله:

The Study of Connected to Grid DFIG Wind Turbines with Fixed Speed through PSCAD Software

## محل انتشار:

كنفرانس بين المللي مهندسي، هنر و محيط زيست (سال: 1393)

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### خلاصه مقاله:

Nowadays, due to their simplicity and high certainty for producing electricity, wind power plants play an important role in supplying energy. In this paper we model a connected to grid DFIG 2MW turbine with fixed speed through PSCAD software. At fixed speeds and under a fixed frequency, connected to grid wind turbines with power inverters need a soft starter, which will increase power quality; in our model for controlling reactive power we have used parallel capacitor compensation at the end of the line. We have used thyristor convertor for grid and generator sides, in which the converter in generator side acts as a rectifier and the converter in grid side acts as an inverter. used a capacitor (middle circuit) between these two converters, which acts as a DC voltage supply

**کلمات کلیدی:**Power Converter, Active and Reactive Power, DFIG, PSCAD

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