

## عنوان مقاله:

Using Pitch and STATCOM Controllers in Variable Speed Wind Turbines for Improving Power Quality and Low Voltage Ride-Through

## محل انتشار:

دوماهنامه نخبگان علوم و مهندسی، دوره 2، شماره 5 (سال: 1396)

تعداد صفحات اصل مقاله: 12

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## خلاصه مقاله:

With regard to their simplicity and high certainty for electricity production, wind power plants in power system play an important role in supplying energy, hence controlling wind turbines has attracted many attentions during recent years. For accessing to an acceptable level of certainty we should apply special controlling strategies in a way that not only respond to consumers' demands in normal condition but also do the same in oscillation times such as changes in atmosphere and load. In this research we have used Pitch and STATCOM controllers in wind turbine variable speed Doubly Fed Induction Generators (DFIG), which improve system stability. The results indicate that using STATCOM controller would improve the LVRT capability and would preserve correct performance of connected to grid DFIG wind turbines. In this research we have two wind turbines 2MW connected to grid in IEEE standard 9 bus simulated through MATLAB/SIMULINK package.

## کلمات کلیدی:

DFIG, Pitch Angle, STATCOM, LVRT

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/722467>

