High frequency resonance of wind turbine generator

This paper presents methods to model and solve high-frequency resonance problems in HVDC and wind power systems. Control and digital ...

Dynamic behavior of offshore wind turbines is examined under varying wave amplitudes and frequencies. This study presents a high-fidelity hydroelastic framework for analyzing the ...

The different factors that impact the frequency characteristic of the wind turbine, thereby making the system prone to SSCI interaction, have been investigated.

llow, IEEE, Lin Cheng, Senior Member, IEEE, and Ioannis Lestas, Member, IEEE Abstract--A dynamic phenomenon known as LCL resonance is often neglected when stability analysis is carried out for ...

In this study, the characteristics of resonance phenomena were investigated using a small wind turbine generator. First, the output waveform of a small wind turbine was obtained by field testing, and the ...

It is common to encounter high-frequency harmonic resonance (HFHR) problems when cables interact with wind turbine generators (WTGs). ...

Abstract: With more and more doubly fed inductor generators (DFIG) connected to the grid, high frequency resonance may occur due to the interaction between DFIG wind turbines and ...

odern high-power wind turbines operating under variable loads and high air turbulence. The article provides a detailed analysis of the mechanisms of electromechanical resonance, including the ...

Abstract: This paper addresses a modeling and analysis methodology for investigating the stochastic harmonics and resonance concerns of wind power plants (WPPs).

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