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Titolo	Analysis of Power System Sub/Super-Synchronous Oscillations Caused by Grid-Connected Wind Power Generation / / by Wenjuan Du, Haifeng Wang
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Analysis of factors affecting the sub/super-synchronous oscillations of a grid-connected PMSG system -- Analysis of sub-synchronous oscillations in a power system with series-compensated transmission line and a sending-end synchronous generator or DFIG -- Open-loop modal resonance to cause sub-synchronous oscillations in a power system with grid-connected wind farms -- Amplifying effect of weak grid connection on the open-loop modal resonance -- Risk of sub/super-synchronous oscillations in a wind power collecting system -- Impedance model based analysis of sub/super-synchronous oscillations caused by grid-connected wind power generation.
Sommario/riassunto	This book provides a systematic introduction to power system sub/super-synchronous oscillations caused by grid-connected wind power generation. The authors look at why oscillations occur and present methods for examining the risk of oscillations. Coverage

includes state-space and impedance model-based analyses, the two main methods for studying the power system sub/super-synchronous oscillations, and new methods for examining oscillations in wind farms. Analysis of Power System Sub/Super-Synchronous Oscillations Caused by Grid-Connected Wind Power Generation provides researchers and students with a single-volume introduction. It is also a valuable professional reference for practicing engineers looking for solutions to oscillation problems. The first book to focus on power system sub/super-synchronous caused by grid-connected wind power generation; Provides a systematic introduction on the subject; Presents new methods to examine the oscillations.