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Titolo	Synchronous Generators and Excitation Systems Operating in a Power System : Measurement Methods and Modeling // by Stefan Paszek, Andrzej Bobo, Sebastian Berhausen, ukasz Majka, Adrian Noco, Piotr Pruski
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Soggetti	Electric power production Engineering mathematics Electrical Power Engineering Engineering Mathematics
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Nota di contenuto	Introduction -- Simulation models of generating unit elements -- Analysis of the sensitivity of generating unit simulation waveforms to changes of model parameters -- Method, algorithm and module of a parameter estimation program for mathematical models of synchronous generator and excitation systems -- Forming and filtration of measurement waveforms -- A system for measuring generator load angle.
Sommario/riassunto	In simulation tests of dynamic states of the power system (PS), the database of parameters of mathematical models of generating units is most commonly used. In many cases, the parameter values are burdened with large errors. Consequently, the results obtained are not reliable and do not allow drawing true conclusions. This monograph presents the developed methods and tools supporting the process of measurement determination of reliable values of parameters of mathematical models of synchronous generators and excitation systems. Special measurement tests are the basis for determining the parameters. The tests can be carried out in conditions of normal operation of generating units, in which electrical machines operate in

the state of saturation of magnetic cores, and voltage regulators can reach limits. This book is intended for specialists in power engineering as well as students of faculties of electrical engineering interested in issues of PS transient states.

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