1. Record Nr. UNINA9910437777103321

Titolo	Power system coherency and model reduction / / Joe H. Chow, editor
Pubbl/distr/stampa	New York, : Springer Science, 2013
ISBN	1-4614-1803-8
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (308 p.)
Collana	Power Electronics and Power Systems, , 2196-3185 ; ; 94
Altri autori (Persone)	ChowJ. H <1951-> (Joe H.)
Disciplina	621.31015118
Soggetti	Power electronics Electric power systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Coherency in Power Systems -- Slow Coherency and Aggregation -- Excitation System Aggregation -- A Hybrid Dynamic Equivalent using ANN-based BoundaryMatching Technique -- Krylov Subspace and Balanced Truncation Methods for Power System Model Reduction -- Reduction of Large Power System Models: A Case Study -- Measurement-based Methods for Model Reduction of Power Systems using Synchrophasors -- Selective Modal Analysis -- InterareaMode Analysis for Large Power Systems using Synchrophasor Data.
Sommario/riassunto	"Power System Coherency and Model Reduction" provides a comprehensive treatment for understanding interarea modes in large power systems and obtaining reduced-order models using the coherency concept and selective modal analysis method. Both linear and nonlinear analysis methods are covered. The ideas in this book are important for designing damping control of interarea modes. Small system examples to illustrate the concepts and large power system examples to illustrate practical applications of the method are included. This is an important reference book for researchers interested in interarea oscillations and model reduction, and power engineers in developing reduced models for power system studies and control design.