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Nota di contenuto	Preface -- 1 Introduction -- 1.1 Risk in Power Systems -- 1.2 Basic Concepts of Power System Risk Assessment -- 1.3 Outline of the Book -- 2 Outage Models of System Components -- 2.1 Introduction -- 2.2 Models of Independent Outages -- 2.3 Models of Dependent Outages -- 2.4 Conclusions -- 3 Parameter Estimation in Outage Models -- 3.1 Introduction -- 3.2 Point Estimation of Mean and Variance of Failure Data -- 3.3 Interval Estimation of Mean and Variance of Failure Data -- 3.4 Estimating Failure Frequency of Individual Components -- 3.5 Estimating Probability from a Binomial Distribution -- 3.6 Experimental Distribution of Failure Data and Its Test -- 3.7 Estimating Parameters in Aging Failure Models -- 3.8 Conclusions -- 4 Elements of Risk Evaluation Methods -- 4.1 Introduction -- 4.2 Methods for Simple Systems -- 4.3 Methods for Complex Systems -- 4.4. Conclusions -- 5

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## Sommario/riassunto

Power system risk assessment is becoming an important and mandatory task in planning, operation, maintenance, and asset management of utilities, particularly under the deregulation environment. This book will provide readers with the tools to solve practical problems using appropriate risk assessment techniques. Both analytical and Monte Carlo evaluation methods are discussed with an emphasis on applied techniques and actual considerations in

generation, transmission, substation, and distribution systems.

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