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| Disciplina | 621.31 |
| Soggetti | Electric power production<br>Power electronics<br>Artificial intelligence<br>Game theory<br>Electrical Power Engineering<br>Power Electronics<br>Artificial Intelligence<br>Game Theory |
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| Nota di contenuto | Introduction to Electricity Markets -- Energy and Ancillary Service Markets -- Reactive Power Ancillary Service Markets -- Network Partitioning Techniques -- Market Mechanisms for Reactive Power Ancillary Service. |
| Sommario/riassunto | This book provides a framework suitable for the design and analysis of market mechanisms suitable for reactive power ancillary service. The book focuses on the formulation of market mechanisms capable of handling the localized nature of reactive power. The book presents tools and methodologies to design a suitable market structure capable of handling the technical challenges associated with the reactive power market like localized nature or reactive power, voltage support requirement, reactive power reserve requirement, and coupling between active reactive power markets. The book also presents techniques suitable for analyzing the market efficiency of different market mechanisms for reactive power ancillary service. The key topics discussed in this book include the relevance and challenges of reactive |

power ancillary service; the design of market mechanisms; network partitioning techniques to handle the localized nature of reactive power; and analysis of market mechanisms for market efficiency. This book is helpful for researchers and graduate students to know about recent advances in this area. Practitioners find the book helpful for understanding how technological advances can be put into practice and learning from case studies that bring out practical challenges. .