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Nota di contenuto	Introduction for renewable power system optimization -- Distributionally Robust Unit Commitment with Enhanced Sisjointed Layered Ambiguity Set -- Downside Risk to Low-carbon Multi-energy System Optimization -- Multi-step Reconfiguration with Many-objective Reduction for Renewable Distribution System -- Credibility Theory Based Fuzzy Chance Constrained AC OPF for Renewable Power System -- Multi-energy Hub Optimization to Enhance Resilience of Renewable Agricultural Microgrid -- Continuous-time Optimization to Improve Demand Defense of Renewable Industrial Park -- Random Clustering and Dynamic Recognition Strategy for Energy Storage System Optimization -- Mobile Energy Storage System Optimization with Peer-to-peer for Resilience Improvement.
Sommario/riassunto	This book investigates in detail renewable power system optimization (RPSO) technology, exploring its potential us to accommodate intermittent, random, and fluctuating renewable energy from the aspects of power supply side, power grid side, demand side and energy storage. RPSO delves into the interdisciplinary field of sustainable energy systems, offering a comprehensive exploration of methodologies and strategies to maximize the efficiency, reliability, and resilience of renewable power systems. Studies on RPSO have

attracted engineers and scientists from various disciplines, such as electrical, computer, transportation, control and management science. The book integrates theoretical frameworks, computational techniques, and practical case studies, which caters to a diverse readers including researchers, engineers, policymakers, and graduate students specializing in renewable energy, electrical engineering, environmental science, and related disciplines. It is particularly beneficial for those seeking to enhance the efficiency, reliability, and resilience of renewable power systems in the face of evolving energy transition challenges.