

1. Record Nr.	UNINA9910764300603321
Autore	Yu Zhen
Titolo	Disaster Intelligent Perception and Emergency Command of Power Grid // by Zhen Yu, Jie Feng, Shiyang Tang, Zeyu Liu, Yiran Yan, Na Luo
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9972-36-1
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (VIII, 373 p. 224 illus., 138 illus. in color.)
Classificazione	TEC031000TEC046000
Disciplina	321.319
Soggetti	Electric power distribution Electric power production Energy Grids and Networks Mechanical Power Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Network awareness and emergency command fundamentals -- Multiple information collection technology of power network disaster loss -- Grid disaster information fusion and integrated prediction technology -- Real-time interaction technologies for grid emergency information -- Grid emergency decision technology -- Intelligent sensing and emergency command system for power grid disaster .
Sommario/riassunto	This open access book addresses the current technical problems of low efficiency of emergency site information collection, lack of flexibility of emergency information interaction, lack of fusion analysis technology and disaster loss prediction model, and low intelligence of emergency auxiliary decision making. The content contains research on multiple information collection technology of power grid disaster loss, fusion analysis and prediction technology of power grid disaster loss information, and real-time information interaction technology between emergency site and command center in this work. This book illustrates the process of developing a prototype system for grid disaster perception and emergency command, which realizes the functions of grid disaster perception and emergency auxiliary decision-making and visualization command. The prototype intelligent perception and

emergency command system for power grid disasters has been piloted in several units. It provided support for disaster loss prediction, disaster damage perception, and emergency command auxiliary decision-making in the earthquake in Sichuan, China, as well as the heavy rainfall in Zhejiang, China and Typhoon No. 9 "Lupi" that registered in Fujian, China, which significantly improved the emergency disposal Work efficiency.
